NAIKOON PARK

MASTER PLAN BACKGROUND DOCUMENT

Prepared for

BC Parks

Ministry of Environment, Lands and Parks
Parks Division

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PREFACE

This Background Document contains information compiled to aid in the preparation of a Master Plan for Naikoon Provincial Park. It includes a brief and selective synopsis of the natural features and history of the park but is not an exhaustive study of these subjects. For more detailed information, the reader should consult the sources listed in Chapter 7. This document has relied heavily upon Cannings (1975), Scudder and Gessler (1989) and Dalzell (1968, 1973).

The list of planning and management issues identified in Chapter 6 of this report may not be complete. It is anticipated that additional issues will be identified by the public.

Reference to the history of Haida occupation and use of the park will be prepared as a separate document, with the assistance of the Old Massett Village Council Office.

Separate reports which will provide more extensive information than is provided here are being prepared by other consultants on the following topics

- an assessment of the vegetation of Naikoon Park,
- a report on the research conducted on the threespine stickleback, and
- an ecological impact assessment at Rose Spit.

ACKNOWLEDGEMENTS

This Background Document was prepared by Moore Resource Management of Queen Charlotte City. It was co-ordinated by Keith Moore with the assistance of consultants Susan Wolff, Margo Hearne, and Charlotte Tarver Husband. Laurel Williams prepared all the figures. Betty Lockhart word-processed and formatted the text. Cindy Davies provided technical assistance. All members of the team are resident on the Queen Charlotte Islands. The document was reviewed and edited by BC Parks, Northern Region.

The assistance of Howard Phillips, Rodney and Maureen Schatz, Karen Ronnenkamp, Sandy Hiller, George Husband and Don Richardson who willingly contributed their personal knowledge and understanding of Naikoon Park is greatly appreciated. The Naikoon Master Planning Study Team also reviewed drafts and contributed to this report.

Dan Adamson and Gerry Ferguson of BC Parks were very helpful in all phases of the preparation of this document and their help is appreciated.

A list of individuals who provided information is included in Appendix 12. Their assistance is also appreciated.

1. INTRODUCTION TO NAIKOON PROVINCIAL PARK

"Never will I forget that ride out along the beach, the majesty of those big trees, and the huge breakers rolling in along the shore - I felt as though God were very near and it seemed to be the loveliest place in the world"

Nellie Hammond, on her first view of north beach going to Tow Hill to set up a hotel on the Hiellen River in 1912.

Naikoon Provincial Park is a Class A Provincial Park located on the northeast corner of Graham Island, the largest of the Queen Charlotte Islands. It was established in 1973 to preserve almost 100 kilometres of expansive beaches and a large area of sand dunes, bogs, wetlands and coastal temperate rainforest. The park provides many outstanding recreational opportunities and conserves some significant physical, biological and historical features. It encompasses 72,641 ha and is the thirteenth largest provincial park in the province.

The park is named from the Haida word "Nai-Kun", which means "long nose" and refers to the prominent spit of sand deposited at Rose Point by the stormy waters of Hecate Strait. Like all parts of Haida Gwaii - the Queen Charlotte Islands - the park area has a long history of occupation and use by the Haida people and figures prominently in their present lifestyle and legends. It is part of the Haida Nation's comprehensive land claim.

The park's beauty and diversity is being discovered by increasing numbers of visitors attracted by the beaches, forests and mysteries of the Queen Charlotte Islands. It will play an important role in the development of the islands as a tourist destination.

Naikoon Park has a rich history of nearly a hundred years of European settlement. Many of the commercial and recreational activities pursued by the early settlers in the park are continued by present Queen Charlotte Island residents.

ROLE AND SIGNIFICANCE OF NAIKOON PARK

The Park Act directs BC Parks to "preserve BC's natural environments for the inspiration, use and enjoyment of the public". This involves balancing conservation and recreation objectives.

In its park system planning process, Parks Plan '90, BC Parks has identified six major goals under these two themes of conservation and recreation. These goals are:

Conservation

* Landscapes - to conserve BC's natural diversity by protecting representatives of the landscapes in BC; and

* Special features - to protect key natural and cultural features.

Recreation

* Tourism travel routes - to provide park attractions and services which enhance tourism travel routes;

* Outdoor recreation holiday destinations - to provide park attractions which serve as key destinations for outdoor holidays;

* Backcountry - to provide outstanding backcountry recreation opportunities; and

* Local recreation - to ensure access to local outdoor recreation opportunities for all British Columbians.

Naikoon Provincial Park meets each of these goals. It contributes to the conservation goals by protecting a sample of the Queen Charlotte Lowlands Landscape. It protects the outstanding natural features of Rose Spit and Tow Hill. Sand dunes, endemic wildlife, migratory and nesting birds, and unique threespine stickleback fish are all protected in the park. Naikoon also protects important Haida heritage and cultural features, and protects some evidence of early European settlement in the area.

Recreation goals are also well served. The park is located on an increasingly important tourist travel route and is becoming an important local destination to the increasing number of visitors to the Queen Charlotte Islands. It is being actively promoted as an extension of the Yellowhead travel route and by the North by Northwest Travel Association. The East Coast beach provides one of the best coastal backcountry hikes in the province for the adventurous backpacker. North Beach provides an excellent destination for shorter duration family oriented outdoor holidays and the park continues to provide a variety of recreational opportunities for local residents and other park visitors.

Naikoon Park contains a number of natural and historical features and recreational opportunities that are nationally, provincially and locally significant. These features are identified in Figures 1.

Figure 1 **Significant Physical, Biological, Historical and Recreational Features in Naikoon Park**

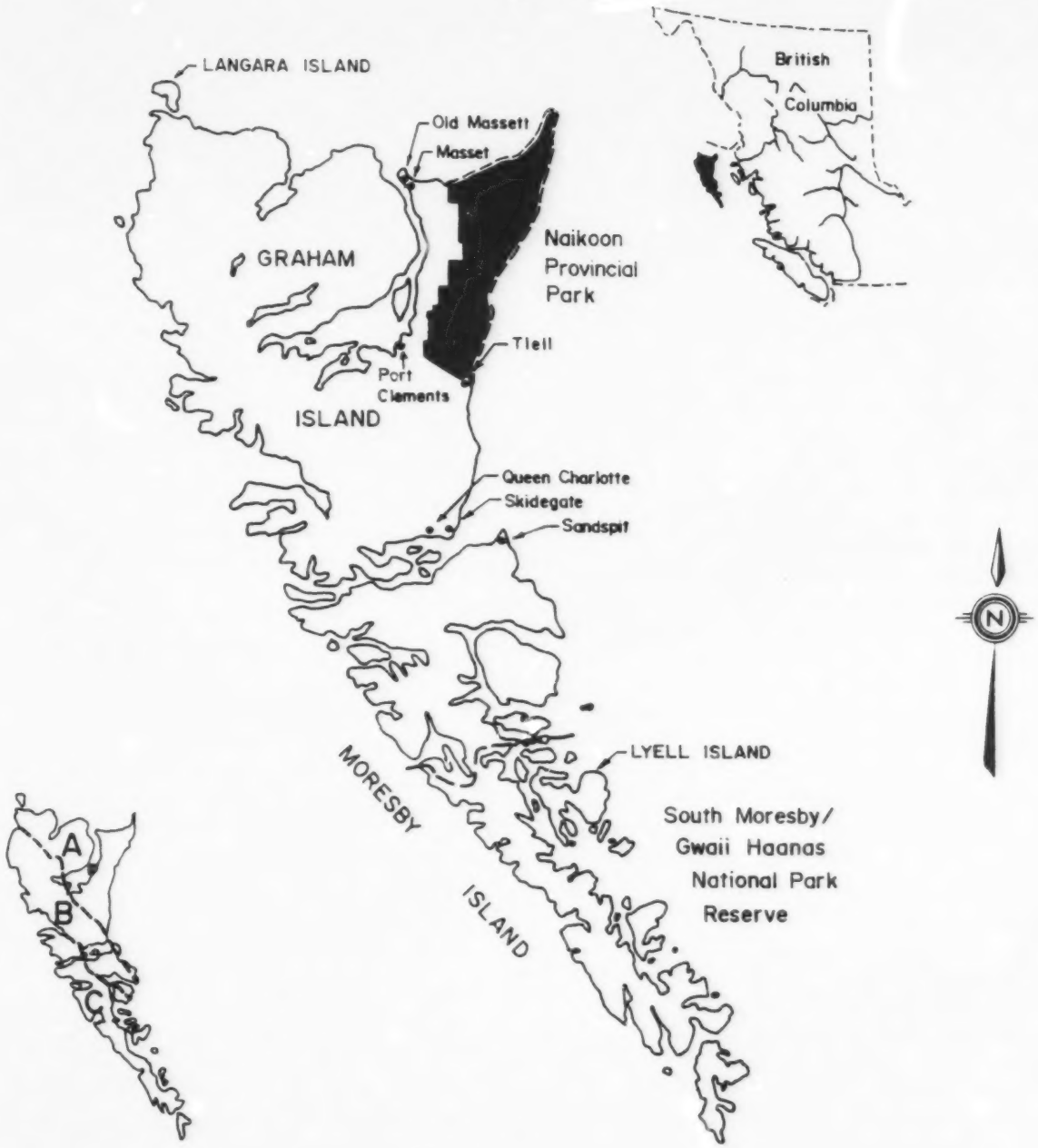
Physical and Biological Features

* Only representation of the Queen Charlotte Lowlands in a provincial or national park.
* Tow Hill - a columnar basaltic rock scoured by glacial ice into a classic roche moutonnee
* Rose Spit - The largest spit in BC significant for its dune ecology, birdlife and marine mammals
* Cape Ball cliffs - The earliest post-glacial site known on the BC coast, dating back 16,000 years and providing evidence for possible glaciel refugia on the Charlottes
* Some of the most extensive sand dunes and beaches in Canada
* Bogs with assemblages of mosses, lichens, liverworts and herbs
* Lakes with pH as low as 3.9
* Three of the only 4 large protected coastal temperate rainforest watersheds in BC
* The best examples of Sitka spruce dune forests in BC
* Probable nest sites of Marbled Murrelets, a "threatened" seabird
* Largest wintering population of Sanderling in BC
* One of the major concentrations of nesting Greater Sandhill Cranes in BC
* Haida weasel - The rarest of the QCI endemics, considered "vulnerable" in Canada
* Endemic subspecies of birds and mammals
* Occurence of Mertensia maritima, a rare sand dune plant

Historical and Recreation Features

* One of only two wilderness shoreline backpack trips in BC
* Beach sand gold deposits known for over a century
* Birdwatching and whalewatching for rare and unusual species
* Accessible beachcombing
* History of agricultural and industrial development and settlement
* Sport fishing on Tlell, Hiellen, Sangan and Cape Ball Rivers
* Pesuta shipwreck
* Opportunities for interpretation of sand dunes, beach erosional features and bog ecology in BC

Figure 2 LOCATION OF NAIKOON PROVINCIAL PARK



2. NATURAL FEATURES OF NAIKOON PARK

CLIMATE

The inclement weather of the Queen Charlotte Islands is well known. Rain, violent wind storms and mists occur year round. The climate is described as a humid temperate climate with mild winters and cool summers. Mean annual rainfall in the park ranges from 1150 to 1370 mm annually with a slightly higher rainfall in the northwest corner of the park. The greatest rainfall occurs in the rainy months of October through December. In the summer months, rainfall averages only 50 to 100 mm per month, but even in summer, measurable precipitation falls on nearly 50 percent of the days.

Average maximum daily summer temperatures range between 14 and 18 degrees with sunshine occurring on slightly less than 50 percent of the possible daylight hours.

Periods of snow and freezing temperatures are common in the winter but are generally of short duration. Measurable snowfall occurs on 3 to 6 days in December and January. Many of the small lakes and ponds freeze for periods of time. In some winters, large accumulations of frozen fish and intertidal shellfish build up in frozen driftlines along the ocean beaches.

Although the east coast of the park may be the sunniest, driest and warmest part of the park, violent rain and wind storms occur throughout the year. These storms pose a number of problems for campers and backpackers. These range from the inconvenience of wet clothes and wet firewood to potentially dangerous problems caused by hypothermia and impassable rivers on the east coast.

PHYSIOGRAPHY AND GEOLOGY

Naikoon Park lies entirely within the physiographic unit known as the Queen Charlotte Lowlands. This unit occupies the northern and eastern portions of Graham Island and is characterized by extensive areas of sphagnum bogs, scrubby coniferous forest and numerous small lakes and ponds.

The park is flat or gently rolling. The vast majority of the area is less than 60 metres above sea level. The highest point in the park is Argonaut Hill at 175 metres. Tow Hill, the other prominent landmark rises 110 metres above sea level.

The entire area of the park is underlain by a thick layer of bedrock called the Skonun Formation. These are sedimentary rocks composed of marine and non-marine sands, sandstones, shale, lignite stringers and conglomerate which were formed during the Tertiary age between 25 and 1.5 million years ago.

Only two bedrock features are exposed in the park - Yakan Point, the only outcrop of Skonun Formation sandstones in the park and Tow Hill, a columnar basaltic outcrop formed 1 to 3 million years ago. Tow Hill was formed when molten basalt intruded through cracks in the Skonun formation, then cooled and formed large hexagonal columns of basalt. It has the typical shape of a "roche moutonnee", with the southern slope rising gently to an abrupt cliff on the north and west sides.

In the northeast corner of the park the sedimentary rocks of the Skonun Formation are overlain by more than a hundred metres of unconsolidated glacial sand and gravel outwash, known as the Argonaut Plain. During the Fraser Glaciation, 25,000 to 10,000 years ago, this area was overlain by ice flowing west from the large Cordilleran Ice Sheet which covered the whole of mainland British Columbia and Hecate Strait. This ice sheet collided with a local ice sheet flowing northeastward from the Queen Charlotte Ranges. The contact line of the two opposing ice sheets ran from Cape Ball to Masset.

With the retreat of the Queen Charlotte Glaciers, the deepest outwash deposits on the Charlottes were formed by streams and meltwater flowing northeastward against the Cordilleran sheet. The braided northeast flowing drainages and the flat topped terrain between the channels and the extensive 75 m high sand and gravel cliffs on the east coast
are the product of those glacial deposits.

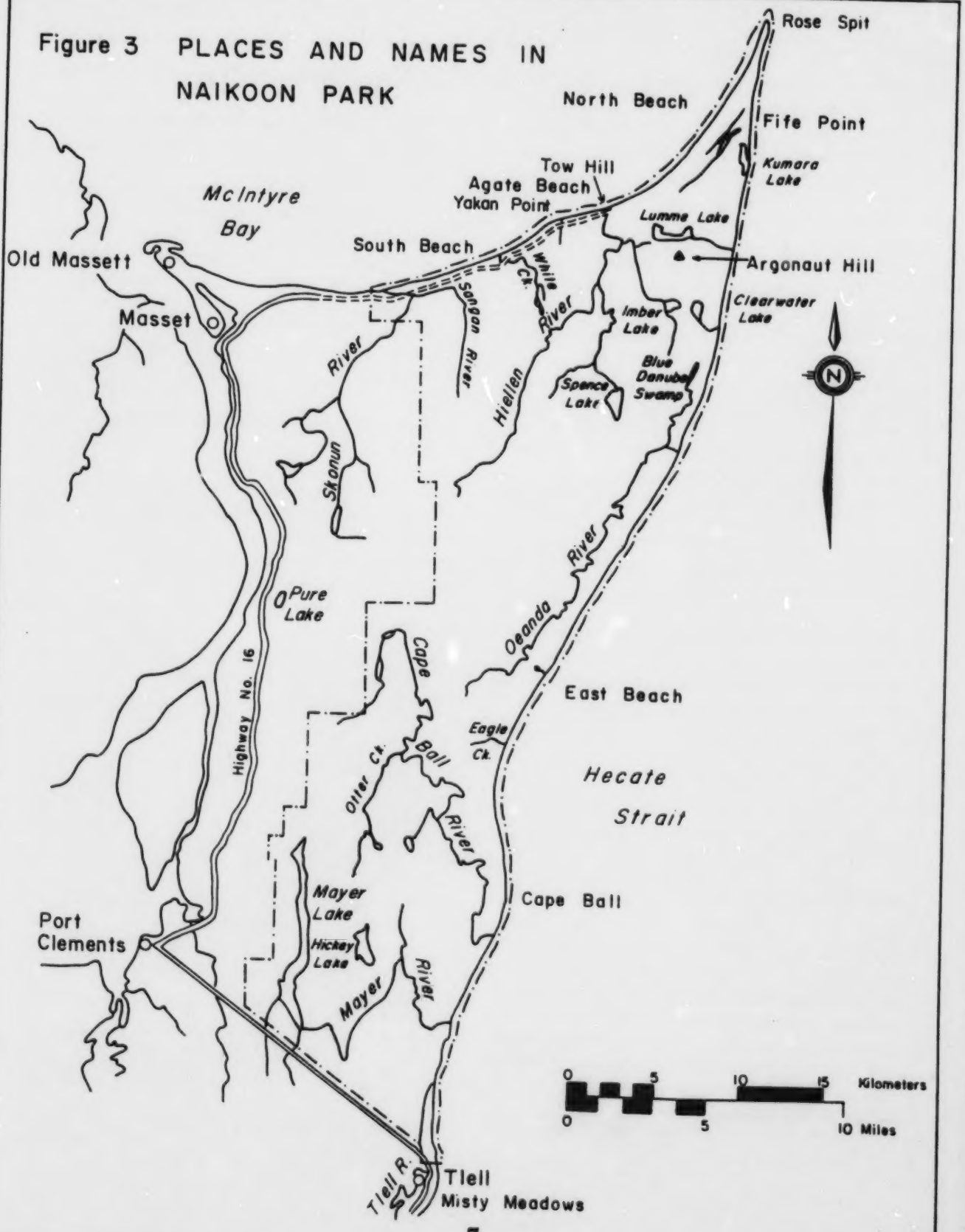
A graphic record of these glacial events is preserved in the cliffs along the east coast beaches. At Cape Ball, scientists have located the earliest post-glacial site known in British Columbia and a continuous record of the vegetation change from 16,000 years ago to the present has been found. Radiocarbon dating from the Cape Ball site indicates that pollen and spores laid down in these sediments date back 16,000 years, to a time when the glaciers on the rest of coastal BC were at their maximum extent. The pollens include trees and might be further evidence for the existence of glacial refugia on the Charlottes.

SHORELINE ENVIRONMENTS

The shoreline and marine environments are interesting geomorphological features in Naikoon Park. The old beach lines, sand dunes, sandbars, beaches and spits have been caused by the erosional action of water and wind on the glacial sand and gravel deposits. The combined effects of the glaciers, the ocean and the wind have created the exceptional 100 kilometres of beaches and dunes which are synonymous with Naikoon Park.

The whole cycle of glacial deposition, erosion by water and wind and then subsequent deposition can be seen within the boundaries of the park. The strong northward current of Hecate Strait erode the sand and gravel cliffs, carry the material up the coast and deposit it in a series of beach ridges along the shore. Gradually all the land north and east of Tow Hill and Argonaut Hill has been built in this way.

Figure 3 PLACES AND NAMES IN NAIKOON PARK



Rose Spit, the prominent spit at the end of the present depositional area, extends three kilometres out to sea and continues for another three kilometres below the water, appearing periodically in exposed sandbars. It is the largest spit of its kind in BC.

Sand dunes are formed by the action of wind on the sand which is eroded from the cliff deposits by the ocean. The dunes advance with the wind across low terrain behind the beaches, sometimes invading the forest and killing trees. Sand piles up behind driftwood or trees and the dunes are gradually colonized by specialized plants, which gather more sand and cause the dunes to grow. Eventually the dunes either stabilize and support trees or they are eroded away by wind and water in an event known as a "blowout". The dune formations at numerous locations on the east coast from Tlell to Rose Spit are some of the most extensive in Canada.

The parallel ridges of old beach lines were formed during times of higher sea levels following the melting of the glaciers. They are a visible feature within the park especially along the Tow Hill road where both the old beachlines and the more recent stabilized dunes can be seen.

INTERTIDAL LIFE

Naikoon Park does not have as extensive an intertidal life as might be expected in a park with so much shoreline. The extensive sandy beaches are a relatively harsh and homogenous environment. They are sparsely populated with the exception of the millions of razor clams found in the sandy lower intertidal areas at North Beach and at one small area near Cape Fife. The clams are a well known attraction and support a major commercial and recreational fishery adjacent to the park.

The two rocky outcrops at Yakan Point and Tow Hill provide the most spectacular intertidal life. Various kelps, coralline algae, sponges and anenomes in a variety of colours can be seen. Limpets, urchins, chitons, mussels, tubeworms and starfish are all present. Tide pools in the rocks contain a variety of small crabs and fish. A list of species found in the intertidal areas at Tow Hill and Agate Beach is included in Appendix 1.

A boulder beach in the park at Tlell has a variety of starfish and crabs and occasional octopi in the water filled crevices among the larger rocks.

LAKES, STREAMS AND ESTUARIES

There are a number of lakes and thousands of shallow bog pools (less than 1 ha) within the park. Most of the lakes are only a few hectares in size and are shallow with mud and gravel bottoms. They are all at low elevation in low relief terrain. The shorelines are gently sloping and stable with sand and gravel beaches and little aquatic vegetation. Many of the tiny ponds dry in the summer and lack distinct inflow and outflow streams.

The largest lake is Mayer Lake, which is 11 kilometres long, 3/4 kilometres wide and 500 ha in area. Other major lakes include

Hickey Lake east of Mayer Lake, Spence Lake just west of the Blue Danube Swamp and Lumme, Clearwater and Imber Lakes near Argonaut Hill. With the exception of Mayer Lake, none of these lakes are accessible except to the experienced hiker.

The rivers and streams in the park are all meandering, low gradient streams which are tidal for a good distance upstream. All are amber or coffee coloured, stained by the tannins which leach from the decomposing vegetation in the bogs which form the headwaters.

A significant feature of the lakes and streams, beside their colour, is their low pH, which ranges from a very acidic 3.9 to 6.5. The presence of fish and other aquatic life in these acidic lakes is very unusual.

Some of the smaller streams do not actually enter the ocean but go sub-surface through the sand dunes. Other larger streams are dammed periodically by drifting sand and wood to form lakes which then break through the piles of driftwood years later. Kumara Lake in particular seems to go through this cycle.

Three of the large streams, the Cape Ball, Oeanda and Hiellen are significant because their watersheds are entirely within the park boundaries and essentially untouched by logging or other industrial activities. Only one other watershed in coastal BC - the Moyeha, in Strathcona Provincial Park - is larger than 5000 ha, undeveloped, and entirely protected in a park.

The Tlell is the largest river flowing through the park but only its lowest tidal reach is within the park. The Sangan, with its tributary, the Skonun, is the largest on the north side but is only partly within the park as well.

Because of the low relief on the Queen Charlotte Lowlands, it is often unclear where one watershed begins and another ends. Some watersheds have been altered by introduced beaver and some streams which formerly drained east now drain to the north. The mouth of the Oeanda was altered in 1925 by settlers digging a drainage ditch.

Because these rivers enter a very stormy ocean environment, there is little estuarine development. However, the intertidal areas at the mouths of the Tlell, Cape Ball, Oeanda and Sangan Rivers have mud banks and gravel terraces which flood at high tide. These highly productive areas contain a variety of estuarine plants and are utilized by fish and migratory waterfowl.

VEGETATION

Naikoon Park lies entirely within the wet hypermaritime subzone of the Coastal Western Hemlock Biogeoclimatic Zone. This ecological unit occupies a large part of eastern Graham, Moresby and the offshore islands and is the driest of the ecological zones on the Charlottes. A 1967 timber cruise described the park area as 30 percent non-forest and 60% mature forest with the remainder immature forest and water.

A number of different plant communities have been described for the park. Cannings describes seven communities as shown in Appendix 2. Some of them are briefly

Stunted pine are found throughout the interior of the park

A spruce tree's roots are exposed after a dune blow-out

described here. A complete description of the vegetation communities in the park is in preparation.

Much of the interior of the park is a continuous series of raised bogs interspersed with swamp and bog forest communities. The bogs include wet depressions and drier hummocks and support a variety of plant associations with a continuous cycle of growth and decay. They are botanically interesting, supporting an array of mosses, lichens, liverworts and herbs as well as "bonsai" trees and shrubs. The open bog forests are dominated by short shore pine and western redcedar trees with minor components of western hemlock and yellow-cedar.

Along the sandy shoreline there is a distinctive and aesthetic forest community affected by salt spray and dominated by Sitka spruce. This forest community is very open with moss as the dominant ground cover and almost no shrubs. There are few herbs on the ground but in spring the pink flowers of the calypso orchid pop through the moss.

Closed canopy climax western hemlock forests make up a relatively small proportion of the park area although good examples of the majestic moss and lichen festooned coastal old-growth temperate rainforest do occur. Forests dominated by alluvial Sitka Spruce occur as ribbons along the major stream channels in the park.

Estuaries and the margins of some of the lakes also support interesting aquatic plant communities.

Although the Queen Charlottes are known to have a relatively high number of endemic and disjunct plant, moss and lichen species associated with sub-alpine habitats and limestone, none of these endemics are known to occur in Naikoon Park. The paleobotanical record of vegetation obtained from the Cape Ball cliffs indicates that several species, including fir and larch trees, which no longer grow here did occur in earlier times.

The Queen Charlottes are the only place in BC where the sea mertensia, a blue bell found on sand dunes, grows and it is found in the park. A number of other unusual and highly specialized plants occur in the sand dune and bog communities and these are probably the park's most interesting vegetation features. They are also the most fragile ecosystems susceptible to disturbance by human activities.

In the Tlell area, some areas of the park contain meadows that were created, and have been maintained over the years by free range cattle.

BIRDS

Over 230 species of birds have been observed on the Queen Charlotte Islands and at least 3/4 of these species are estimated to occur within Naikoon Park. The sand, gravel and boulder beaches, associated driftwood zones and grassy meadows, dunes, rock formations, river, estuaries, bogs, lakes and old-growth forest in the park invite a diversity of species that is unusual within such a relatively small area. A list of breeding bird species in the park and their habitats is in Appendix 3.

Rose Spit provides some of the best birdwatching on the Queen Charlottes.

Here the confluence of currents and waves from the south and west provide a constant upwelling of nutrients which attract diverse pelagic species within easy viewing range. The Spit acts as a buffer against extreme winds and waves and whether it is blowing southeasterly in winter or northwesterly in summer, one side of the Spit is always relatively calm. Diving ducks, Shearwaters, Auklets and others can be seen by the thousands in optimum conditions. The inshore waters provide shelter for Red-throated Loon and Marbled Murrelets. Cormorants fly by at dawn and the Yellow-billed Loon has been observed in May.

The rolling, grass-covered sandhills at the Spit run in a northeasterly direction from the end of the tree line and provide shelter for Longspurs in winter and nesting habitat for passerines in summer. A variety of raptors including Peales Peregrine Falcons and Red-tailed Hawks, perch on drift logs surrounding the sand hills. Snowy Owls have been seen occasionally on the beaches. This largely occurs when their summer arctic food source, the lemming, become scarce. Locals report that the Snowy Owls that do end up on the Island's beaches often die.

The park attracts a variety of seabirds, waterfowl, shorebirds and errant land birds and raptors as they migrate on the Pacific Flyway during spring and fall migration. Dunlin, Pectoral Sandpiper and Western Sandpiper stop on North Beach and since habitat for these species is rare on the coast, the park provides a viewing opportunity that is rare in BC. Black Brant, and other waterfowl follow the land contours during migration and are seen in the nearshore and offshore waters of the park.

The spring and fall shorebird migration is of provincial significance with Dunlin, Turnstones, and Western Sandpipers on the low beach. The wintering Sanderling population is the largest in the province. The beach near Tow Hill is the only one on the Charlottes where the sand is fine enough to support the amphipods that these birds feed on. Semi-palmated Plovers, Least Sandpipers and Killdeer can be observed exhibiting territorial behaviour and are known to nest on the high beach in the park. Whimbrel have been seen in the dune vegetation.

The forest bordering the beaches and dunes provides nesting habitat for a variety of songbirds with transients, Townsend's Warbler, Hermit and Swainson's Thrush arriving between April and June. The resident Red-breasted Nuthatch, Brown Creeper and Varied Thrush are heard singing on their territories from May to July. Bald Eagles and Red-tailed Hawks are year round residents and nest in the park. They are often seen perched on the spruce forest overlooking the stark and windy beaches

The ponds, bogs and lakes of the interior of the park provide nesting habitat for Red-throated Loon, Common Loon and Sandhill Crane. The Vancouver race of Canada Goose also nests in the interior bogs of the park. The total population of this race is only a few thousand individuals and a breeding survey has yet to be done within the park.

Little is known of the breeding biology of the Greater Sandhill Crane. The park has one of the major nesting concentrations of this species in BC and it relies on the

seclusion of the bogs and ponds in the interior of the park.

Of particular interest is the incidence of Marbled Murrelet activity in the park. The species was designated as "threatened" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 1990. Marbled Murrelets are thought to nest on mossy branches of tall trees and while a nest has still to be found on the islands, extensive Marbled Murrelet activity has been observed in the forest and on a number of the lakes in the park.

A 1990 survey of nighttime activity found significant numbers of breeding Marbled Murrelets in the Hiellen watershed and they can be seen all year round feeding in the lee of Rose Spit. The relatively undisturbed habitat of Naikoon Park is a perfect site for intensive study of the breeding biology of this mysterious species.

Except for the Marbled Murrelet, none of the seabird species known to nest in large numbers on the small islands of the Queen Charlottes, nest in Naikoon Park.

Unusual species observed within the park include Hammond's Flycatcher, Say's Phoebe, Eastern Kingbird and Mockingbird. Snow Buntings, Water Pipits and Gyrfalcon are regular winter visitors. The subspecies of Stellars Jay, Northern Saw-whet Owl, Hairy Woodpecker and Pine Grosbeak endemic to the Queen Charlottes all occur within the park.

FISH

In the freshwater lakes, rivers and streams of Naikoon Park, eleven species of fish are known to occur. These fish species are listed in Appendix 4.

Pink salmon are the most abundant of the three salmon species and there are significant runs in the six major rivers in the park - the Tlell, Mayer, Cape Ball and Oeanda on the east coast and the Hiellen and Sangan on the north coast. Coho occur in all major streams in the park, migrating far up into the headwater lakes and small tributaries to spawn. Coho fry and juveniles spend up to two years rearing in the headwater lakes and streams. Chum salmon occur in the park but in low numbers. There are no known runs of sockeye or chinook salmon.

Adult steelhead (sea-run rainbow) trout migrate into the major rivers from December to April to spawn, and then, unlike the salmon, return to the ocean. Young and juvenile rainbow spend up to four years rearing in the faster flowing reaches before migrating to the ocean. Resident rainbow may occur in some of the lakes of the park but resident cutthroat trout are more common. Sea-run cutthroat occur in the lower reaches of the large streams.

Sea-run and resident Dolly Varden char are widespread in the lakes and streams and occur throughout the park. Prickly sculpin and coastrange sculpin are both less common but also occur in lakes and streams. A third species of sculpin and a small number of other marine fish enter the lower, intertidal reaches of the rivers from the ocean.

The most interesting, and best studied, fish in the park is the threespine stickleback. This small fish occurs in many of the lakes and streams in and adjacent to the park and has been the subject of extensive research conducted for over 20 years by Dr. Tom Reimchen. His work has identified a number of factors which make the stickleback of the Queen Charlotte Lowlands unique in the world.

A giant form of stickleback (up to 116 mm) has been studied in Mayer Lake and in the Sangan River drainage. Populations without spines or lateral armour plates have been studied in other lakes. The wide variation in stickleback morphology which occurs over a distance of a few km is exceptional and has provided a unique opportunity to study the adaptation of a species to different predation by fish, birds and aquatic predators. The Charlotte unarmoured stickleback is listed as a "threatened" species in Canada.

Dr. Reimchen has also identified some previously unknown or rare parasites and research on these continues. They appear to indicate a very long period of divergence (up to three million years) from adjacent mainland species and may provide further evidence of glacial refugia on the Charlottes. His extensive work on the stickleback will be reported in a forthcoming report.

Two species of lamprey, the Pacific lamprey and western brook lamprey, have been found in the Tlell River and probably occur in other streams in the park.

NATIVE LAND MAMMALS

Ten species of native land mammals occur on the Queen Charlotte Islands and although wildlife surveys within the park are very limited, it is assumed that all ten occur within Naikoon Park. These species include river otter, black bear, pine marten, weasel, deer mouse, dusky shrew and four species of bat. They are listed in Appendix 5. There are no estimates of populations and there have been no studies of any of the species in the park.

The diversity of species on the islands is low compared to the adjacent mainland where 31 species are found, but the isolation of the islands has led to the evolution of distinct Charlotte subspecies of most of the native mammals. This makes the park particularly important as a "sanctuary" for present and future protection of these unique subspecies.

The Queen Charlotte black bear is reputed to be the largest subspecies in North America. Bears are resident in the park and are occasionally seen by visitors. To date, there have been few interactions with humans in the wilderness areas and campgrounds in the park but bear complaints are increasing near residences within and adjacent to the park.

The Queen Charlotte marten forages extensively on the beaches and preys on birds in the forests. They are frequently seen at Misty Meadows campground. They are recognized as a distinct island subspecies and a recent masters thesis confirms their distinctive traits.

The Haida weasel is now an extremely rare animal and is listed by COSEWIC as "vulnerable". According to some biologists it should be on the "endangered" list because of its rarity. Very little is known of its density, habitat requirements or breeding biology and some biologists think that if more were known, the weasel might be considered a separate species. In the 1920's, the Haida weasel was much more common and was reported to inhabit each of the settlers' cabins in the park area where it was encouraged in order to control the mouse populations.

Of the larger land mammals, the otter is the only one not recognized as a separate island subspecies. It also occurs in Southeast Alaska. River otters are found along the ocean shorelines, the Hiellen, Tlell, Mayer and Cape Ball rivers and at Mayer Lake.

Two subspecies of shrew and deer mouse occur on the Queen Charlottes but only one of each occurs in the park. The other subspecies are confined to some of the offshore islands.

Very little is known about any of the bats in the park. It is not even certain how many species there are, but at least four are confirmed. One, the Keen's myotis, may occur only on the Queen Charlottes and is listed by COSEWIC as "vulnerable".

MARINE MAMMALS

Some of the most dramatic and exciting wildlife found in the park are the sea mammals of the nearshore and offshore waters. These are listed in Appendix 6.

Grey whales are readily visible from shore, particularly at North Beach and Rose Spit. They can be observed on their spring migration past the Charlottes from early April into late June and can be seen spouting as they feed in the shallows of Hecate Strait and Dixon Entrance in other months of the year as well. This Pacific herd is the only population of grey whales left in the world and has now recovered from the brink of extinction to number over 21,000.

Humpback whales appear at different times of the year and have been seen waving their long flippers as they roll in the shallows on the east side of Rose Spit. These huge creatures usually winter in Hawaii or Mexico and summer on offshore banks. Their numbers are increasing in Southeast Alaska and more of them may be seen off Naikoon in time.

Killer whales have also been seen within viewing distance of the park. Minke, Sei, Fin, Blue and Sperm whales have been reported but their exact distribution is unknown. Dall and Pacific harbour porpoise and Pacific white-sided dolphins inhabit the offshore waters. Steller sealions are frequently seen in the shallows close to shore although their numbers have greatly diminished.

Hair seals can be seen close to shore on the north and east beaches, often watching the viewer watching them. They use the dried-up sandbars in Hecate Strait and at Rose Spit as haulouts at low tide. Northern fur seals join their cousins, the hair seal, on the dried-up sandbars during their migrations southward in December and January and northward in early spring.

Sea otters became extinct on the Islands in the early part of the century and are unlikely to be seen at present. However, their numbers are expanding on Vancouver Island, the mid-coast of BC, and nearby in southeast Alaska, and these animals are now occasionally sighted. They may soon return to the waters of the Queen Charlottes in larger numbers.

NATIVE AMPHIBIANS AND REPTILES

There are no reptiles and only one native amphibian on the Queen Charlotte Islands. The northwestern toad is relatively common in the forest and bogs and occurs throughout the park.

INVERTEBRATES

Very little is known about the invertebrates in Naikoon Park. Dragonflies and damselflies are a very prominent feature of the pond and bog landscapes and several species have been identified. They have been studied because the larvae prey on fish in the lakes and ponds.

Ground beetles have also been studied on the Islands and have been collected in the park. Of the 59 species identified to date, three are species found only on the Charlottes. However, none of these have been found in the park.

INTRODUCED SPECIES

Over the last century a number of wildlife species have been introduced to the Islands and are now found within the park. These include black-tailed deer (introduced 1880's and 1900-16), beaver (1949), raccoon (about 1940), muskrat (1924), red squirrel (1950), rats, and feral cattle. Red deer from New Zealand were introduced between 1911 and 1917 to the Tow Hill area and survived for a number of years, possibly until World War II. In addition, feral dogs, rabbits and cows are now found in the park and sheep and goats have ranged on private land within the park. A list of introduced species is included in Appendix 7.

Virtually all of these introductions have altered the natural ecosystems of the Islands. Beaver, which were introduced at Gold Creek within the park, are now widespread. Their dams are changing the course of streams and have raised the level of many small lakes submerging the adjacent forest and bogs. Their activities destroy the shoreline habitat for fish, including the threespine stickleback, and nesting birds such as Red-throated Loon and Canada Goose.

Deer browsing has radically changed the composition of the understory vegetation in the forest. They have practically eliminated some species and greatly reduced others including cloudberry on the muskeg and wild strawberries in the high dunes. Cattle have affected vegetation on the dune ecosystems.

Raccoons are known to disturb ground nesting birds, but it has yet to be determined whether or not they are affecting the ground nesting Sandhill Crane,

Canada Goose and Blue Grouse populations in Naikoon. Biologists have hypothesized that the introduction of red squirrels might have caused the decline in the weasel population by increasing the population of marten.

The tree frog was introduced to Graham Island in the mid-1960's and has spread throughout the island. Its effects on the natural biota of Naikoon Park have not been documented to date.

Birds have also been introduced over the years. Populations of pheasant (and rabbits) were hunted on the Islands in the 1940's and 1950's, but appear to have died out after the introduction of the racoon. The Rod and Gun Club of Queen Charlotte City released more pheasants in 1968 but they failed to re-establish. The Ring-necked Pheasants that can be seen now in the park, in the vicinity of private land near Tlell and along the Tow Hill Road were introduced in 1985.

A large number of introduced plant species occur in the park. On some of the sand dunes introduced grasses form the dominant plant cover, having been introduced by early settlers specifically for the purpose of stabilizing the moving dunes. At Tlell, and elsewhere in the park, introduced Scotch broom and thistles (both Scotch and Canadian) are forming an increasingly thick ground cover, especially along the highway.

3. EUROPEAN HISTORY OF GRAHAM ISLAND

The history of European settlement within Naikoon Park has followed similar economic patterns found elsewhere on the Queen Charlotte Islands. A "boom and bust" cycle occurred and recurred in farming, logging and mining. Some of the initial European settlers of the Islands had an urge to "tame the land", only to abandon it within a few short years. The isolation, lack of communication and transportation, and the inclement weather made settlement difficult. Only those who fell in love with the rugged natural beauty and independent lifestyle remained.

EARLY CONTACT

The first recorded sighting by Europeans of the Queen Charlotte Islands was made by Juan Perez in 1774. By 1789 an aggressive and profitable maritime fur trade developed between the Haida people and foreign (American and British) traders. By 1820, however, the sea otter population was wiped out and the trade collapsed. Gold was discovered on the west coast of Moresby Island in 1852 and there was a brief gold rush. Soon after, gold was also discovered in the black sands along the beaches on the east coast of Graham Island and sparked interest in placer mining. These were among the earliest gold claims staked in the colony of British Columbia and predate the Fraser River gold rush of 1858.

European interest in the Islands then waned until the arrival of the Hudson Bay Company post at Masset. Missionaries followed in the 1870's and were among the very first settlers. By 1884, Anglican and Methodist missionaries had established churches and schools at Masset and Skidegate and were providing medical care.

Two notable government surveys by George Dawson (1878) and Newton Chittenden (1882) were conducted with a view to economic development of mining, forestry, and farming. Coastal steamships began a regular, though infrequent, service in the 1880s, providing a communication and transportation link between the Islands and the mainland. This brought businessmen, government officials and even tourists. By 1900, timber, fish, fish oil, and minerals were being exported from the archipelago.

SETTLEMENT AND THE DEVELOPMENT OF AGRICULTURE

From 1908 to 1915 land hungry settlers began to arrive, lured by the provincial government offering of crown land pre-emptions based on surveys of 1891 and 1908. They had high expectations of establishing prosperous farms on the pest-free, fertile "Garden of Eden"

Islands advertised by government and land developers. A 1906 newspaper ad declared that "strawberries as big as your fist...wild celery as big as your wrist" grew on Graham Island.

The entire coast of Naikoon Park, from the Sangan River to Tlell, was preempted between 1908 and 1930 with all the north shore preempted by 1911. However, not all of these preemptions were homesteaded. The inland area between Rose Spit and the Oeanda River, the Skonun River, and Mayer Lake were also settled.

The industrious settlers cleared land, built roads, dug drainage ditches, built homes, drained bogs, planted crops, raised animals and marketed their products. Several homesteaders at the Oeanda River dug a drainage ditch 10 feet wide and 600 feet long to drain their land. A 1500 acre farm near Rose Spit had a large herd of Jersey cows and marketed butter under their own brand name, the C & H. Cattle and sheep were raised for meat which was sold to local logging and mining camps as well as shipped to Prince Rupert.

By 1912, a settlement at the mouth of the Hiellen River included a general store, post office, telephone station, lodgings, and cafe. A gas boat ran settlers between Masset and Tow Hill ($2.00 round trip), and a hotel was built. Roads fanned out from the Hiellen to homesteads at Rose Spit, Swan Creek, the Oeanda River and Cape Fife. The remains of these corduroy wagon roads are still visible and are now heritage trails. The location of these heritage sites and trails is shown in Figure 4 and a description is included in Appendix 8.

The majority of these ventures failed to prosper due to the expense of land clearing and bog drainage, high transportation costs, lack of reliable markets, and isolation. Many single males volunteered to fight in World War I and left, never to return. By 1920, many homesteads were abandoned, and only a handful of settlers remained after the Great Depression of the 1930s.

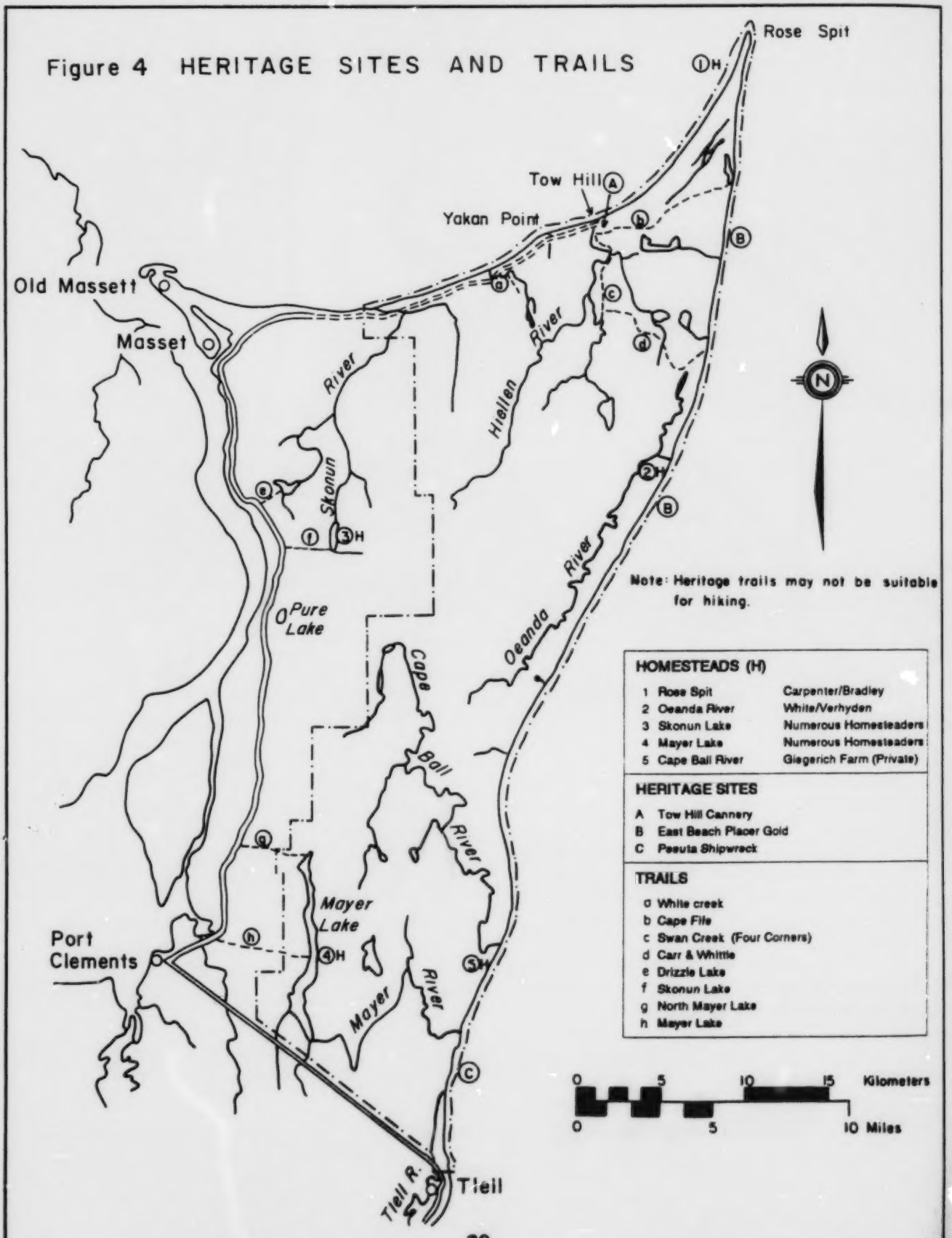
THOSE WHO REMAINED

A few families remained within the park working their land. These included members of the Carpenter family living a few miles west of Rose Spit until 1939 and Harry Crooks at White Creek until 1971. Bob Beitush farmed at the mouth of the Tlell River from 1912 until his death in 1964. A number of pre-emptions became crown land grants and are private holdings within the park today. There are visible reminders of these settlements and old fence posts, sections of corduroy roads, clearings, drainage ditches, and collapsed houses can still be found. The settlers named many of the places within the park and one outstanding natural feature, the Oeanda River was permanently altered when it changed course and now flows in the drainage ditch dug in 1925.

CATTLE

One surviving legacy of early agricultural attempts are the feral cows of Naikoon Park.

Figure 4 HERITAGE SITES AND TRAILS



Cattle were brought to the Queen Charlotte Islands in 1872 and from the beginning had free range. Due to the mild climate and lush natural grasses of the sloughs, muskegs and beach, the cattle fared well. Later, when settlers began to leave, many of the cattle were left to free range on and around the settlers property. Some of these properties including the cattle were later sold. Some of these property owners still claim ownership over a number of these free ranging cattle, but proof of ownership of individual animals is not possible because they are not branded.

The cattle ranging the east coast beach have not been farmed for at least 25 years, and some of the herds in the interior have been fending for themselves for the last 50 years. Some of the property owners killed and butchered cattle themselves, as well as sold rights for others to butcher an animal up until about 1965. By the mid-1960's some people began slaughtering cattle themselves with a "free-for-all" type of attitude.

A court ruling in 1980, resulting from charges of illegal slaughter of cattle, named these unfarmed cattle as feral, and that it is illegal to hunt them.

Feral cattle continue to free range throughout much of the park. Some cattle at the north beach are farmed in the sense that they receive food supplements on occasion. A herd at the Cape Ball River-Mayer Lake area are claimed to be owned by a local property owner. However, deciding which individual animals are privately owned and which are feral remains contested.

From 1919 to 1967, the Richardson Ranch of Tlell ranged cattle from Tlell to the Oeanda River. This herd is now fenced due to these rustling problems. Other local farmers continued to free range their stock until 1988, when the Ministry of Highways closed free range along Island roads and fenced the highway. However, a small herd of privately owned cattle still range in and out of the northwest corner of the park area.

INDUSTRIAL DEVELOPMENT

The post-World War I boom period from 1918 to 1930 saw a new influx of people into Naikoon Park. They, too, were industrious and full of dreams and built a cannery, sawmills and resorts, planned townsites, and placer mined. A mansion, the Sangan Grange, was built at the mouth of the Sangan River by Fred Ward in 1921 and was a showcase example of loghouse architecture. A scaled model of this building is located in the Queen Charlotte Islands Museum.

The introduction of the sealed can made possible the development of a number of fish, crab, and clam canneries on the Queen Charlotte Islands. From Yakan Point to 5 miles east of Tow Hill, sections of beach were staked out and leased by the clam cannery (much like staking a placer claim). These leases were held by the Simpson family of Masset until 1968.

The Simpsons operated the Tow Hill clam cannery from 1923 to 1930 at the Hiellen River near the site where the settlers' store had been. Ninety homes and a store were built for the cannery workers. A fleet of 6 Model T trucks used the beaches to transport the clams to Masset. The cannery

closed down in the Depression but commercial clam digging continues to this date.

Naikoon Park has been historically exploited for its timber, fisheries, and mineral potential. In the early 1900's the Provincial government encouraged these developments by issuing timber, coal, and placer mining leases to all who applied. Placer gold was the primary motive for pre-emptions in the Rose Spit to Cape Fife region. The beach sand deposits on the east coast were staked before 1870 and were among the first placer gold leases issued in the Colony of B.C.

A number of gold-mining expeditions and schemes took place on the east coast from the 1920's to the 1930's. A small group of homesteaders eked out a living mining gold from the black sands of the east coast. Other schemes were more elaborate. The Cabrera Placer Gold Mine was located on Rose Spit in 1925. Small amounts of gold were extracted from the sands by pouring a cyanide solution over heated copper plates, which were then cooled. Another shortlived venture near Cape Fife in 1935 dug a well with a pile driver, scraped up black sand from the beach with a bulldozer, put it in a hopper, then through sluice boxes. Using 1500 pounds of mercury, they tried to extract gold, but very little was obtained and the mine folded in a few months. Winter storms in 1935 broke through the driftwood and washed away the entire operation, buildings and all.

A prosperous lumber market developed during World War I and by 1918 there were numerous sawmills in operation. The lumber for the plank road started in 1925 from Masset to Tow Hill came from a mill on the Chown River. The largest logging operation within Naikoon Park took place at Mayer Lake, which was selectively logged for poles in the 1920's - 30's and again in the mid-1960's. A machine called the Tugaway Pole Road tractor was built to haul the poles out on a pole railway from Mayer Lake to Kumdis Bay on Masset Inlet. Later, a 6 km logging road was constructed from the lake to the present highway. Little remains of the pole railway - as with all former development, it has grown over and decayed.

EARLY TOURISM

At the Sangan River, one of the first tourist accommodations, the Sangan Holiday Resort, was built in 1922, and operated there for many years. At Tlell, the wife of Mexican Tom Hodges opened a lodge called the Do Drop Inn. In 1926, the Dunes Hotel was built on the same site and later this hotel was bought by a group of Americans who ran it as a vacation fishing resort. The original building burned down in 1965 and the Dunes was soon re-built.

In the 1970's a number of lots, including the Dunes Hotel, was purchased by the provincial government under the Greenbelt Program. BC Parks acquired the lot with the Dunes Hotel from the Greenbelt Program when Naikoon Park was established. This building is used as the Naikoon Park headquarters.

4. PARK VISITORS AND RECREATIONAL ACTIVITIES

To describe visitor activities and use patterns, Naikoon Park is divided into six major activity areas as shown in Figure 5. These areas are:

* the North Shore area;
* the Rose Spit area;
* the East Beach area;
* the Tlell River area;
* the Mayer Lake area; and
* the Interior area.

Visitor activities in Naikoon Park are concentrated along the spectacular beaches, particularly at North Beach and the Tlell River, and in nearby day use areas. Figure 6 provides a summary of the main recreational activities and where those activities are most common. Figures 7, 8 and 9 show day use and campground use in the park from 1985 to 1990.

The park facilities including the headquarters, campgrounds, shelters, trails and day use areas are shown in Figure 10 and described in Figure 11.

Visitor information and interpretation services in the park are limited. Figure 12 provides a summary of the available information and interpretation facilities.

A Note About Use Figures

This section provides some statistics on park use. Campground use figures are fairly accurate, because each camping group is counted. However, it is more difficult to measure day use with accuracy. Therefore, day use figures can be used to give some general trends, while at the same time realizing the limitations of this information.

VISITOR ACTIVITY AREAS

THE NORTH SHORE AREAS

This area extends from the northwestern entrance of the park near Chown Brook to the Rose Spit Ecological Reserve and includes the portion of the East Beach north of Kumara Lake that is reached by the Cape Fife trail. Along the Tow Hill Road it includes South Beach, Agate Beach and North Beach. Located within this high use area are a number of privately owned properties, two Indian Reserves and an Ecological Reserve.

This area receives the most intensive use in the park. Major attractions in the area include Agate Beach Campground, Tow Hill with its basalt columns and blow hole, the expansive sandy North Beach and old-growth forest along the Cape Fife trail.

Figure 5 VISITOR ACTIVITY AREAS

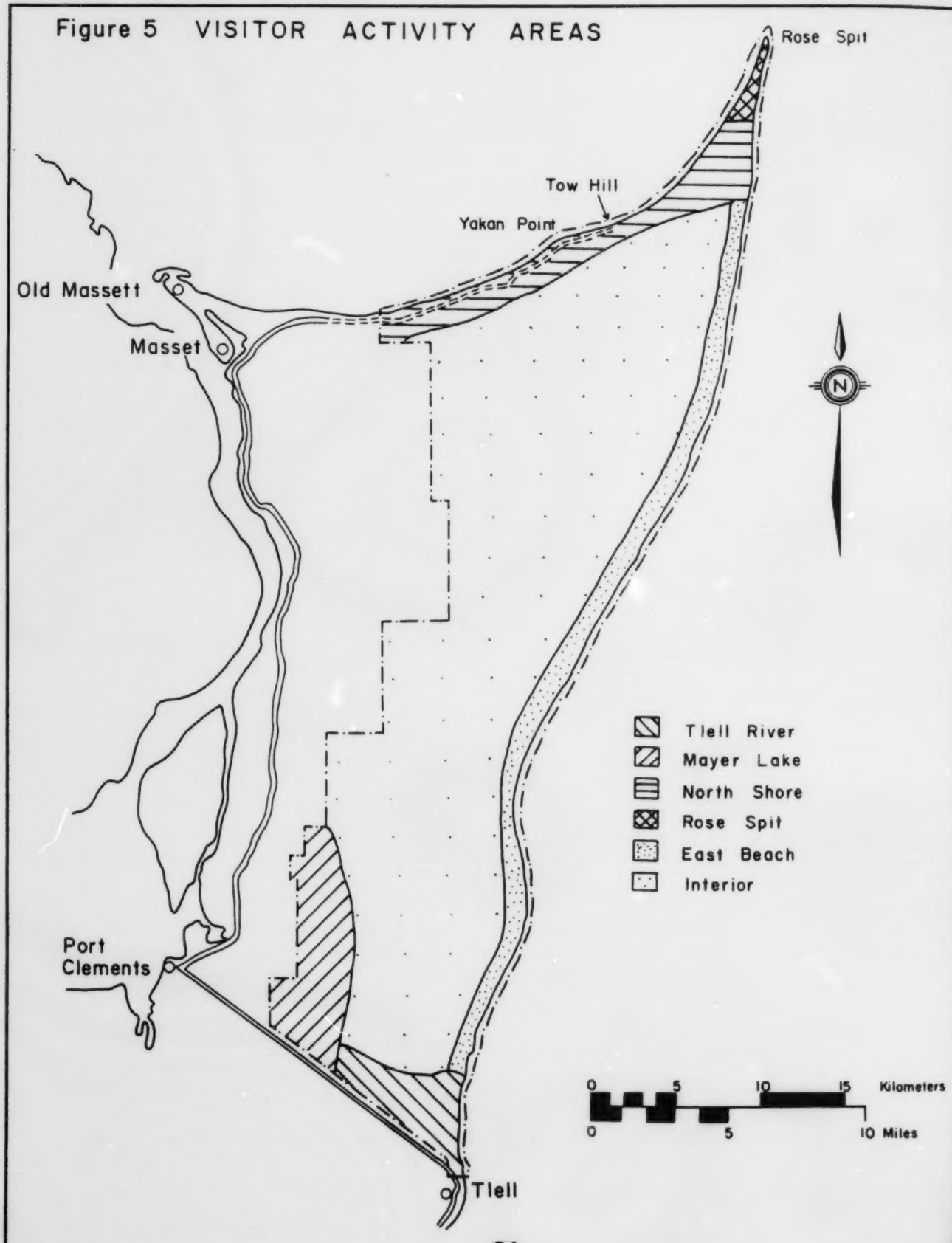


Figure 6 **Summary of Recreational Activities in Naikoon Park**

Type of use	Activity	Location
Hiking	Short trail walks (less than 1 hr)	Tow Hill, Misty Meadows
	Day hikes	Cape Fife trail, Tlell River Trail (to wreck of Pesuta), heritage trails (not maintained)
	Overnight hikes (Backpacking)	East Beach, North Beach, Tow Hill - Rose Spit - Cape Fife Circuit
	Beach walks	all park beaches
Beach activities	Beachcombing	all park beaches
	Beach play	North Beach, Agate Beach, South Beach, Misty Meadows beach
	Clam digging	North and South Beach
	Scallop harvesting	After winter storms on North Beach
	Crabbing	North Beach, South Beach
Nature study	Wildlife viewing/ photography	throughout park, marine mammals and birds at Rose Spit
	forest and bog ecology	Cape Fife trail, Tlell River trail, bogs
	intertidal	Agate Beach, Blowhole, tidepools in the bolder reefs at Tlell
Camping	Front country (road access)	Misty Meadows campground, Agate Beach campground
	Back country	Random camping, mostly along coast, Mayer Lake, park shelters at Cape Fife, Oeanda and Cape Ball
Picknicking	Tables, parking	Tlell River Bridge, Misty Meadows, Mayer Lake, Agate Beach, Tow Hill
Touring	by vehicle and ATV	Highway 16 and all park roads, vehicle use on beaches is allowed below the driftwood line

Figure 6 Cont'd

Type of use	Activity	Location
	by bicycle	Highway 16 and all park roads, bicycles allowed on beaches below the driftwood line
	by horse	Tlell and East Beach, horses allowed below the driftwood line
	by plane or helicopter	aerial sightseeing trips, primarily along park coastline
Hunting	deer, bear, ducks	North Beach, East Beach, Mayer Lake
	geese	Tlell
Fishing	coho, steelhead cutthroat, Dolly Varden	Sangan, Hiellen, Tlell, Mayer, Cape Ball rivers, Mayer Lake
Watersports	canoeing	Mayer Lake, Tlell River
	powerboating	Mayer Lake
	kayaking	surf kayaking on North and south Beaches
	windsurfing	Mayer Lake
	swimming	Mayer Lake, ocean swimming

Figure 7. Naikoon Park Day Use, 1985-1990

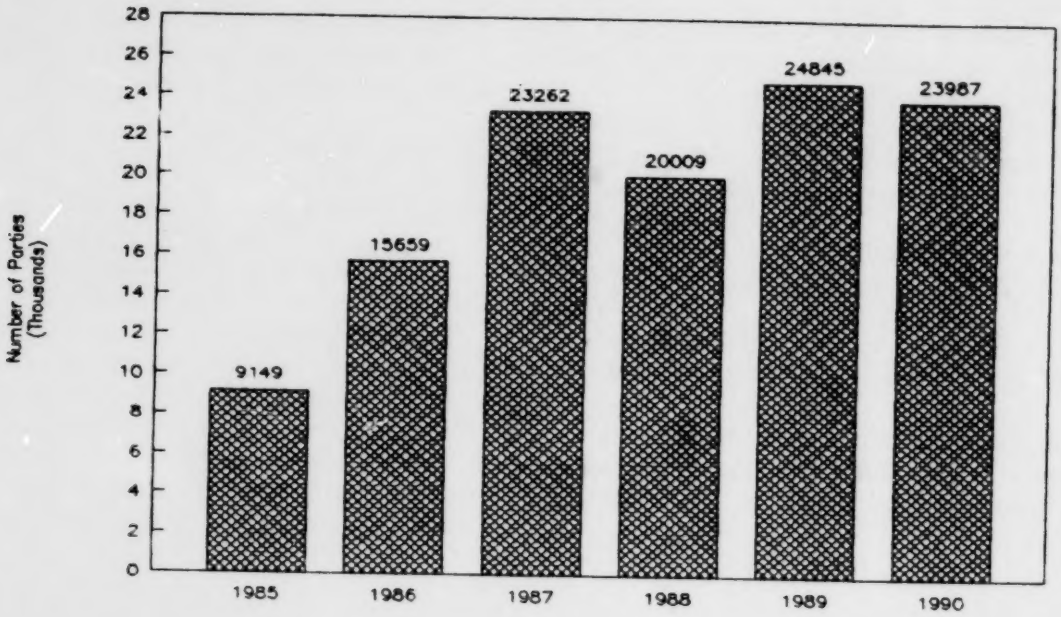
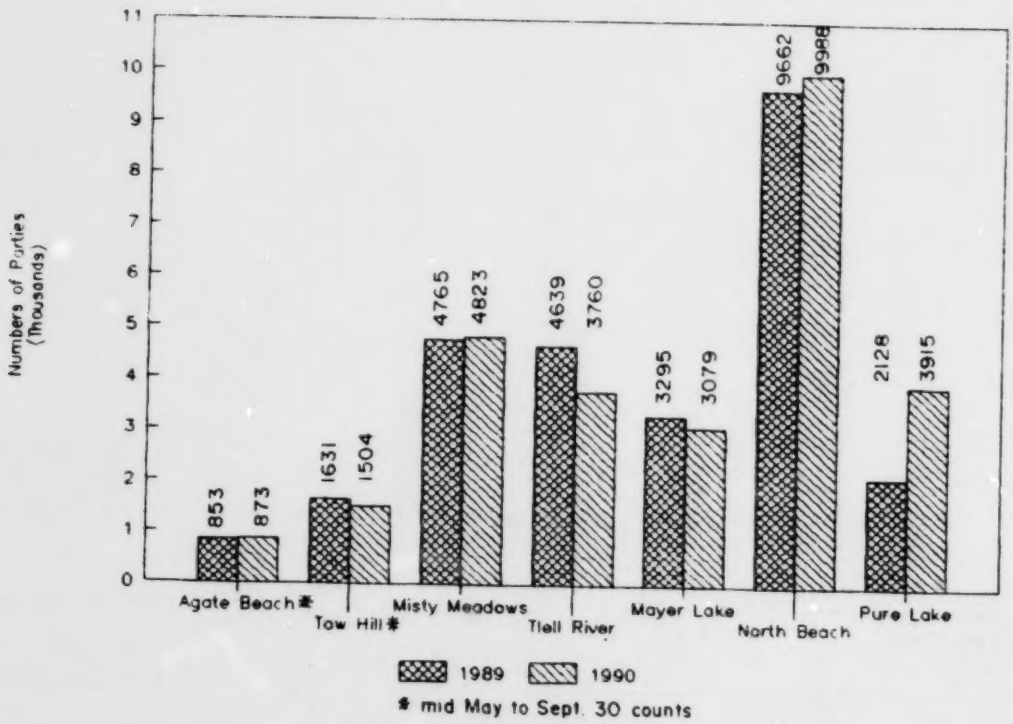


Figure 8. Naikoon Park Day Use Area Attendance, 1989-1990



Park facilities and services in this area include the Agate Beach campground, Tow Hill day use area and picnic site, information signs at the Tow Hill parking area and trails to Cape Fife and Tow Hill. These are shown in Figure 13.

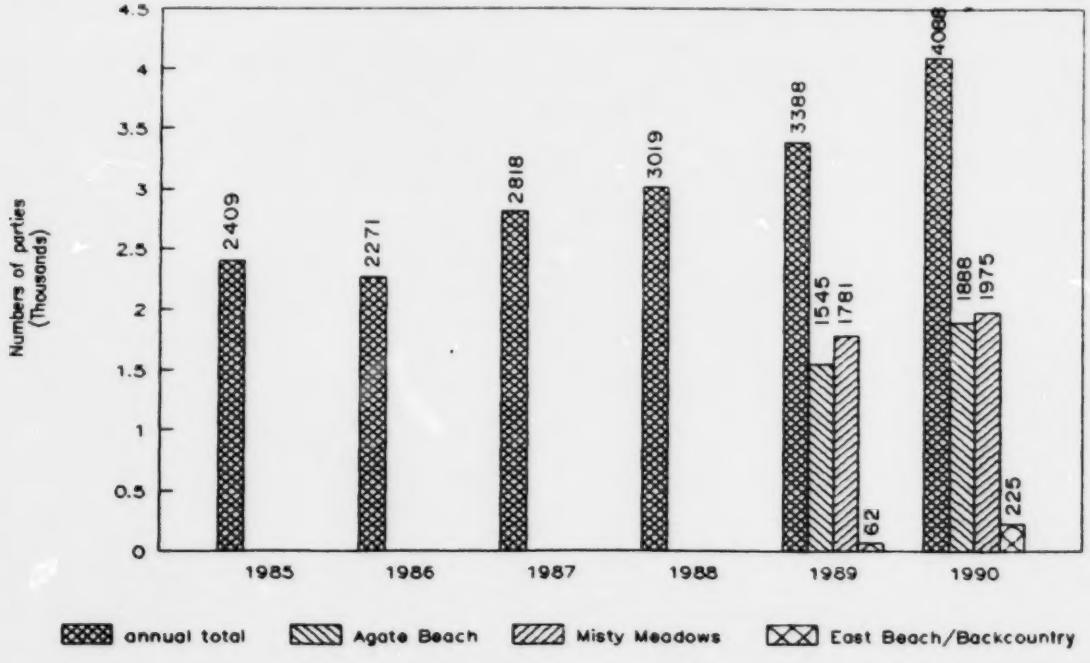
Popular activities in the area include camping, hiking, cycling, beach combing, clam digging, fishing, agate collecting, bird watching, whale watching, nature study and photography, beach play, and surf kayaking.

A popular 31 km circuit for hikers runs from Tow Hill along the Cape Fife Trail to Kumara Lake, then north to Rose Spit, and west along North Beach back to Tow Hill. The beach from Tow Hill to Rose Spit is the most popular for vehicle users.

Overnight Use

Agate Beach campsite provides oceanfront camping and although it is exposed and often windy, it has had one of the highest occupancy rates (at 66 percent in 1990) of any campground in the Skeena District (see Figure 14). Use of the campground increased by 22 percent from 1989 to 1990 which was double the increase in use at Misty Meadows campground. The campsite was expanded to 32 vehicle camping sites in the fall of 1991 and now has more sites

Figure 9. Naikoon Park Campground Use, 1985-1990



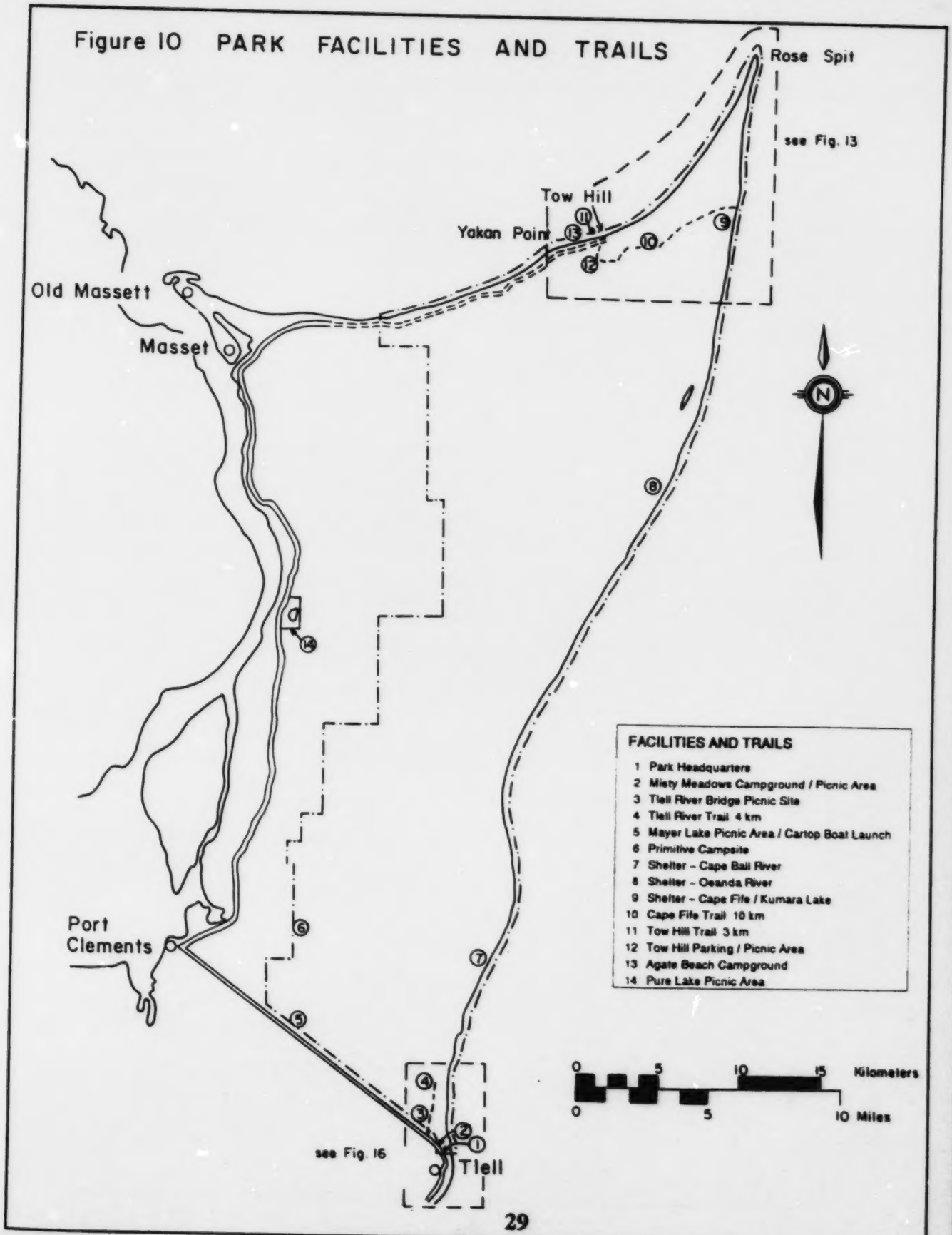


Figure 10 PARK FACILITIES AND TRAILS
Rose Spit
see Fig. 13
Tow Hill
Yakan Point
Old Massett
Masset
Port Clements
Tlell
see Fig. 16
N
FACILITIES AND TRAILS
1 Park Headquarters
2 Misty Meadows Campground / Picnic Area
3 Tlell River Bridge Picnic Site
4 Tlell River Trail 4 km
5 Mayer Lake Picnic Area / Cartop Boat Launch
6 Primitive Campsite
7 Shelter - Cape Ball River
8 Shelter - Oeanda River
9 Shelter - Cape Fife / Kumara Lake
10 Cape Fife Trail 10 km
11 Tow Hill Trail 3 km
12 Tow Hill Parking / Picnic Area
13 Agate Beach Campground
14 Pure Lake Picnic Area
0 5 10 15 Kilometers
0 5 10 Miles

Figure 11 **Park Facilities in Naikoon Park**

PARK HEADQUARTERS

The Headquarters is located near the southern boundary of the park at Tlell. It includes space, meeting room and accommodation for park staff. An outdoor exhibit, pay telephone and water tap are located adjacent to the building. Information on the park and general area is provided by the park staff when they are available.

CAMPGROUNDS

Misty Meadows	30 units, 8 tent pads, firepits toilets, water, firewood, serviced from May to September, operated year round.
Agate Beach	32 units, 6 tent pads, firepits, toilets, water, firewood, serviced from May to September, operated year round. Campground was expanded in Fall of 1991.

PRIMITIVE SHELTERS

There are three shelters along the East Beach. all have airtight heaters in poor condition and no water, firepits, toilets or signs.

Cape Ball shelter	2 km south of mouth of Cape Ball River
Oeanda shelter	1.6 km south of mouth of Oeanda River
Cape Fife shelter	At beach terminus of Cape Fife trail, near Kumara Lake

DAY USE AND PICNIC SITES

Misty Meadows	5 tables, parking, toilets, trail to beach
Tlell River Bridge	3 tables, parking, toilets, information signs, Tlell River trail head
Mayer Lake	2 tables, parking, toilets, boat launch
Tow Hill	4 tables, parking, toilets, information signs, trail to blowhole and summit of Tow Hill, Cape Fife trail head
Agate Beach	Picnic shelter in campground

Figure 11 cont'd

MAINTAINED TRAILS

Tlell River	along west side of Tlell River 4 km
Misty Meadows	walk through forest and dunes to beach 100 m
Tow Hill	to blowhole at edge of shore and to summit of Tow Hill 3 km
Cape Fife	from Hiellen bridge to East Beach, through forest and bogs 10 km

ROADS

The following roads provide access into the Park from Highway 16

Mayer Lake Road	gravel, 1 km
Tow Hill Road	gravel, 15.5 km
Beitush Road	gravel, 2 km

Figure 12 **Visitor Information and Interpretation**

OFF-SITE INFORMATION CENTRES

- Masset Tourist Information Centre
- Queen Charlotte Visitor Infocentre
- Canadian Parks Service offices, Sandspit and Queen Charlotte City
- Various commercial establishments

PARK HEADQUARTERS

- Resident parks staff

CAMPGROUNDS

- Bulletin boards - orientation to campground ad camping etiquette
- Misty Meadows Campground leaflet - produced by facilities contractor
- Personal Information services provided by facility contractors and volunteer hosts

INFORMATION/ORIENTATION SIGNS located at

- Park Headquarters (outdoors)
- Tlell River Bridge Picnic Site
- Tow Hill Parking Area

PUBLICATIONS

- Naikoon Park promotional card
- Naikoon Park brochure and map
- East Beach hike information sheet

FILMS

- Knowledge Network film on park, available for use on BC and Alaska Ferries
- Other videos include clips of Naikoon i.e. North by Northwest Tourism video

Figure 13 TOW HILL AREA FACILITIES AND TRAILS

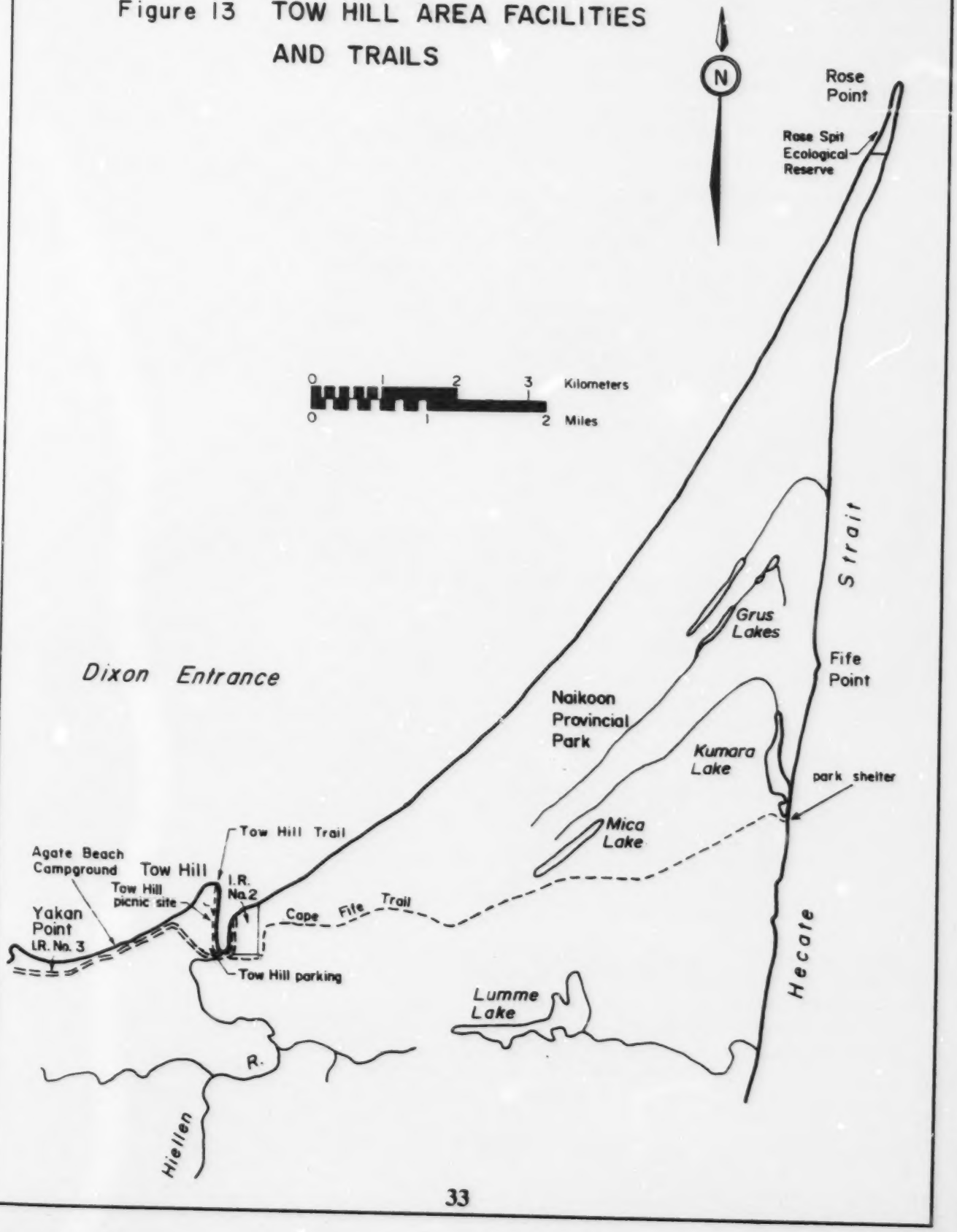


Figure 14. Agate Beach Campground Occupancy Rate, 1989-1990

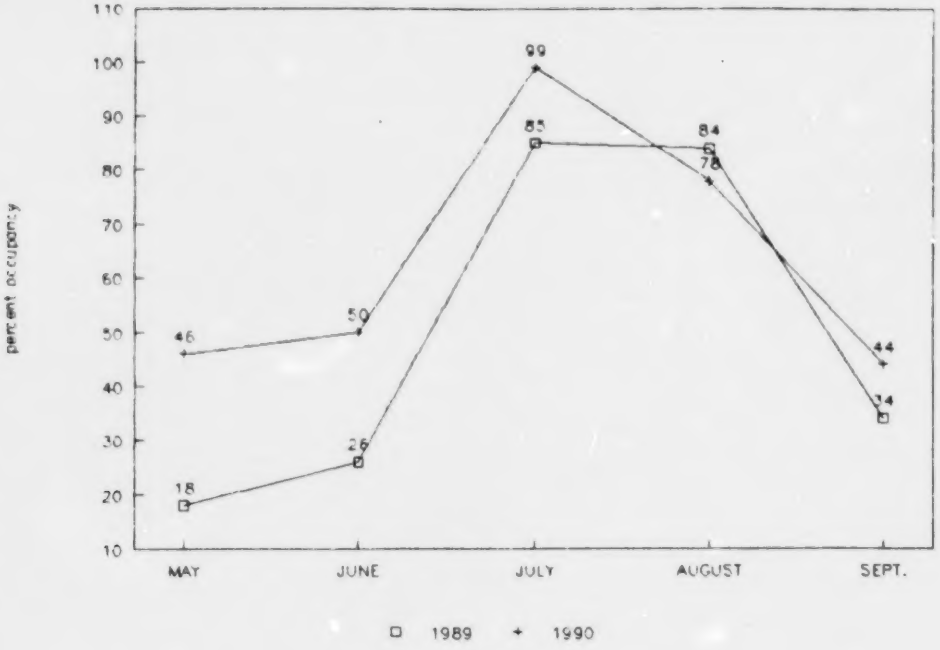
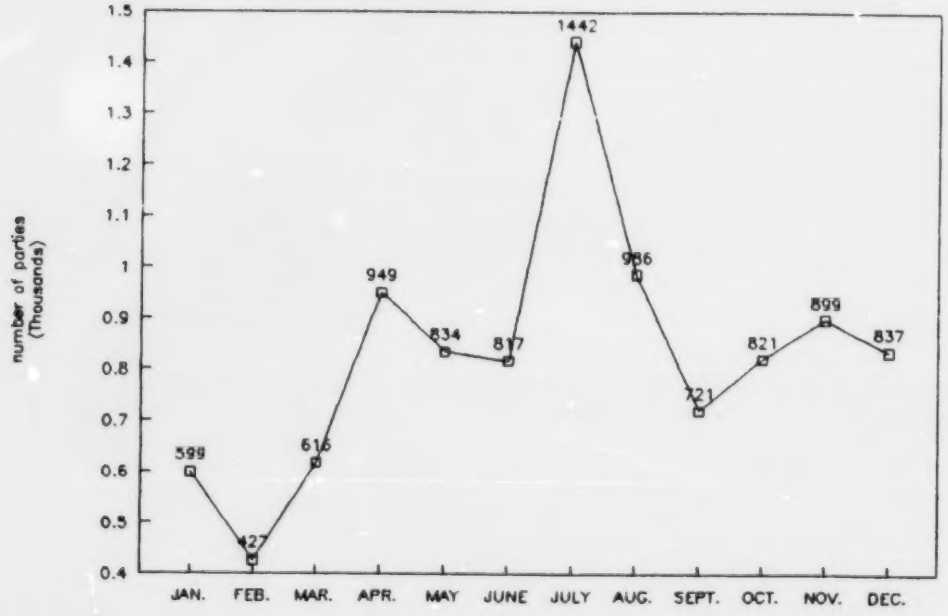


Figure 15. North Beach Day Use, 1990



than Misty Meadows campground. It also includes 6 tent pads.

A visitor survey of campground users was conducted in 1988. Results indicated that 39.9 percent of the campers used tents and 79.4 percent planned to stay one or two nights. About 80 percent were first time users. Visitors seem satisfied with the facilities and although 14.3 percent wished to see electrical hookups and showers provided, 16.8 percent requested no more development. Visitors were least satisfied with park roads, signs and visitor information provided.

Day Use

The picnic shelter at the Agate Beach campground is available for day users. The rocky beach is popular for agate collectors and at low tide, the intertidal life at Tow Hill is exposed.

Tow Hill day use area includes a picnic site along the Hiellen River and 3 km of hiking trails; one leading to the Blow Hole, and the second to the summit of Tow Hill. The 10 km trail to Cape Fife and the East Beach also starts here. An information shelter at the Tow Hill parking lot orients visitors to the area. During the summer, use of the area is heavy and the parking lot is often full. Tow Hill receives about twice as much day use as Agate Beach. Day use during July 1991 was up 56 percent at Tow Hill compared to July 1990, but down by 10 percent at Agate Beach. Estimates of visitor use are not available for the off-season.

North Beach is the most popular and heavily used area in the park especially during July and August (see Figure 15). The spectacular expanse of beach with its bird and marine life makes the area a major attraction to both local and off-island visitors.

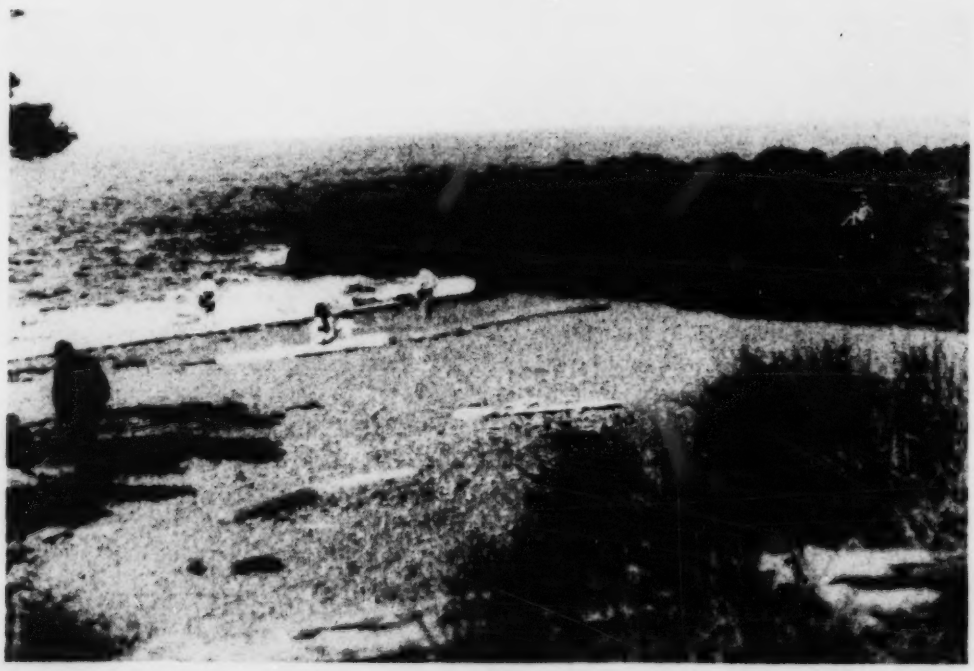
It is also the beach most heavily used by vehicles. In 1990, approximately 10,000 vehicles crossed the Hiellen Bridge but a high proportion was repeat use by commercial clam diggers and local residents who visit the beach year round. High use in the off-season usually occurs at times of winter storms and good tides for clam digging. Many North Beach visitors park their vehicles at Tow Hill or on the Indian Reserve and walk out onto the beach. Others take all types of vehicles, ranging from motor homes to all terrain vehicles, out on to the hard sand of North Beach and drive for varying distances.

ROSE SPIT AREA

This area is significant for its rich birdlife, dune ecology and spectacular marine life. Most of the area is an Ecological Reserve, established for preservation, education and scientific research purposes. Seasonal observations of whales and sea lions, migrating waterfowl and pelagic birds draw natural history enthusiasts. The imposing feature of Rose Spit and the harsh and spectacular marine environment also draw visitors. No statistics are available on use of the area, but it is a small percentage of the North Beach use figures.

A rough track runs along the southern edge of the Reserve and vehicles driving from North Beach to East Beach are requested to follow it. No statistics are available on the numbers of vehicles driving through this

The beach west of Tow Hill



Beach and rock outcropings at base of Tow Hill

area from North Beach to the East Beach. Some camping occurs in the forest on the dunes on the north and south sides of the Spit.

EAST BEACH AREA

The East Beach area forms the eastern shoreline of the park from Kumara Lake to the Tlell River, a length of about 67 km. It is a wonderful backcountry opportunity, unique in Canada, offering many days of beach hiking. Hikers can reach the East Beach by the 10 km Cape Fife trail at the north end or by the Tlell River trail at the south end. Camping is allowed anywhere along the beach and primitive shelters are located along the route near Cape Ball, the Oeanda River and Cape Fife. The shelter at Cape Fife receives heavy daily use in the summer.

In 1989, 62 individuals registered voluntarily before starting the East Beach hike. In 1990, 225 registered but these figures probably represent less than 50 percent of those who hiked the entire route. More groups of people hike only part of the route and turn around. Statistics on repeat use by local residents are unavailable, but this use is considered to be significant.

Backcountry hiking and camping, beach combing, birdwatching, whale watching, nature study and photography are the main visitor activities. Here backpackers have the opportunity for a remote wilderness experience in spectacular coastal scenery, one of only two such hikes in coastal British Columbia. Swamps and bog communities behind the sand dunes can be reached in a number of areas along the East Beach but there are no signs or trails. Of particular interest is the Blue Danube Swamp north of the Oeanda River.

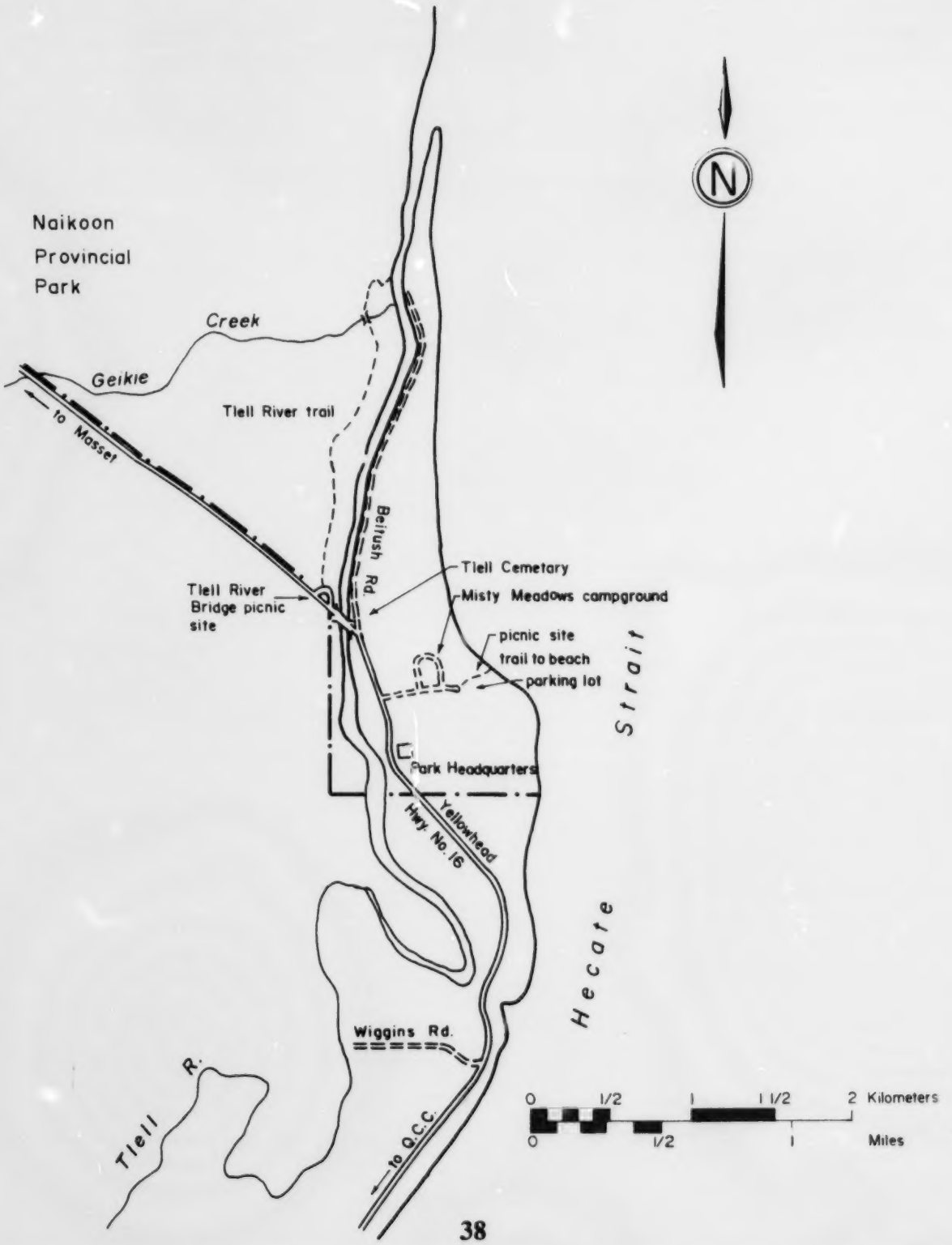
The East Beach is also a popular adventure for four wheel drive and all-terrain vehicles, who travel up or down the beach between Rose Spit and Tlell beachcombing and enjoying the wilderness and coastal scenery. Some vehicles complete the trip between the two points while others go only part way. The section of beach between Eagle Creek and the Oeanda River receives less use for this reason. A number of cabins have been built and are used by groups in vehicles. Owners of several parcels of private property along the East coast also drive on the beach to reach their properties.

BC Parks allows vehicles to drive on the East Beach provided vehicles stay below the driftwood line or to designated routes. There are no statistics on the extent of the vehicle traffic on the beach but it fluctuates from year to year and most of the vehicle use is by Queen Charlotte Island residents. A number of vehicles (about 8-10 a year) become stuck in soft sand or become trapped on the beach by rising tides. Usually, these vehicles are later retrieved when the tides recede.

THE TLELL RIVER AREA

The Tlell River area extends from the southern boundary of the park north to the wreck of the Pesuta. This area forms the southern tip of the park and is readily accessible from Highway 16.

Figure 16 TLELL RIVER AREA FACILITIES AND TRAILS



Park facilities and services include the Park Headquarters office and outdoor information exhibit; Misty Meadows Campground and day use area; and the Tlell River bridge picnic site with exhibit and hiking trail. The Tlell River is a major feature in this area, renowned for its steelhead and salmon fishing. The east bank of the river is accessed by Beitush Road along which are privately owned properties. Along the west bank, a picturesque trail runs from Highway 16 down to the mouth of the river. These facilities are shown in Figure 16.

The Park Headquarters is open year round to visitors seeking information about the park or the Queen Charlottes in general. Hours of operation are limited by staff availability.

An outdoor information exhibit provides a brief orientation to the park plus emergency messages. Information and interpretive material are limited and there are no personal interpretive services provided. The Headquarters facility presently serves as the park's primary visitor staging area, and complements the services provided at the Canadian Parks Service offices in Sandspit and Queen Charlotte City, the Tourist Information Centre in Masset and Visitor Infocentre in Queen Charlotte City.

Predominant visitor activities in this area include hiking, beachcombing, bird and whale watching, nature study and photography. Big winter storms draw local storm watchers and beachcombers. Local residents ride horses along the beach and the use of mountain bicycles is increasing.

Overnight Use

Misty Meadows Campground at Tlell has 30 sites, eight of which include tent pads. The Campground is open year round and is managed by a facility operator from mid-May until the end of September. Figure 17 shows the seasonal campground occupancy rate at Misty Meadows for 1989 and 1990.

A visitor satisfaction survey conducted in 1988 indicated that almost one-half of the campers (42.4 percent) use tents. About 85 percent of the users stay from one to three nights. Visitors indicated that they are very happy with the campground but want more information and more activities in the area.

There is no cook shelter in the campground and no group camping or overflow camping facilities are provided. There are no facilities for the handicapped.

The area used for the Tlell Fall Fair, across the highway from the Park Headquarters, is used for group camping, day use and softball by local residents.

Day Use

Adjacent to the campground is the Misty Meadows day use and picnic area. A short trail leads from the parking area to the beach and from here, visitors can hike north along the beach about five km to the mouth of the Tlell River. Misty Meadows is the second most popular day use area in the park. During 1990, 4,823 parties visited this site (see Figure 8).

The Tlell River Bridge picnic site also receives significant use. The Tlell River trail leads from the picnic area and provides

Campers at Agate Beach Campground

Mayer Lake provides boating opportunities

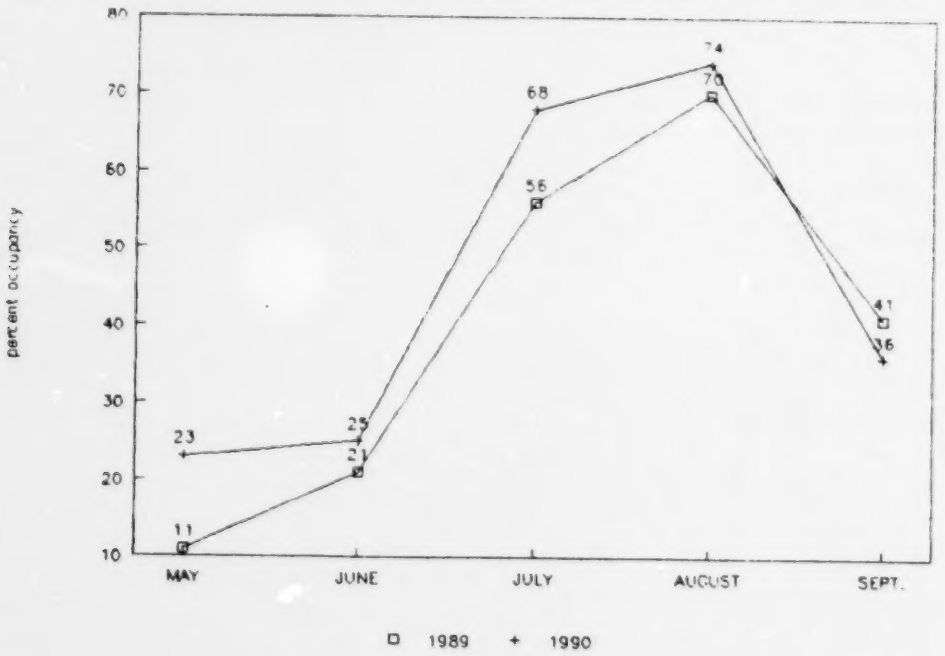
the main access to East Beach from this south end of the park. This trail leads through 2 km of beautiful forest with a moss carpeted forest floor, following a ridge above the river before dropping down to the river bank.

This hike from the picnic area continues to the wreck of the Pesuta which is a popular half day or day trip. The parking area is limited and expanded parking facilities are being considered at the park Headquarters for the East Beach backcountry user.

The Tlell River is a world class steelhead and trout stream and in the fall has an excellent coho run. Sportfishing is popular and draws a number of off-island fishermen. Fishing is also excellent at the mouth of the river where anglers either use boats or surf cast for coho.

Vehicles access the East Beach from the Tlell unit and must cross the Tlell River to reach the beach. At low tide, vehicles can safely cross the river at a point located off Beitush Road near the Tlell River House.

Figure 17. Misty Meadows Campground Occupancy Rate 1989-1990



However, the Department of Fisheries and Oceans has posted this crossing site closed from March 1 to October 15 of every year to protect fish habitat. The southeast shore of the Tlell from the end of Beitush Road to the tidal boundary is closed to all vehicle traffic year round. Some vehicles access the beach from the end of Wiggins Road to the south of the park. From a point near the end of Beitush Road, vehicles also travel out to the beach and cross the river at a more hazardous point at the mouth of the river.

There is some local vehicle use of the Tlell Beach, particularly in the fall by anglers. No statistics are available but vehicle use at Tlell is much less than at North Beach.

MAYER LAKE AREA

Mayer Lake is the largest lake in the park and an important day use area. It is reached from Highway 16 by a 1 km gravel road. Popular activities include fishing and canoeing. It is also used for windsurfing and in the fall is used for deer hunting. Picnic tables and toilets are provided and a car top boat launch is located near the picnic area.

During the 1990 season an estimated 3,079 parties used the area, with the highest visitation occurring in July and August. In 1991 there was a noticeable increase in canoeing. Random camping occurs down the lake shore and is particularly popular at the narrows. No toilet facilities are provided at this site.

PARK INTERIOR AREA

The interior of the park is largely flat, low and boggy with hundreds of ponds and a number of lakes and sluggish, meandering rivers. It includes a variety of bog forest vegetation communities. Access to this wilderness area is limited primarily to old settlers' trails which are predominately overgrown. There are no maintained trails in the area and there are no statistics available on visitor use, which is assumed to be low.

Mayer Lake and its northern shores offer the visitor the most readily accessible experience of this boggy wetland. The experienced hiker could also set off overland from the Cape Fife Trail, from Tow Hill or the highway. Parts of the interior region are rich in early settlement history.

PARK VISITOR PROFILES

There are two broad types of visitors to Naikoon Park - those who are resident on the Queen Charlotte Islands and those who travel to the islands as tourists.

Local resident use occurs in all months of the year and encompasses many types of activities but there is little statistical information on local visitor use. Established patterns of use on North Beach by commercial clam diggers, as well as non-

Wet portions of the Cape Fife Trail have boardwalks

An river slowly meanders from Naikoon's interior

commercial food gatherers and beachcombers, significantly influence the visitor use statistics, especially during the spring and winter months.

Three major tourism products are identified for the Queen Charlottes in the Queen Charlotte Islands Tourism Development Plan prepared by the DPA Group. These are touring, sportfishing and wilderness - cultural products.

Both sportfishing and wilderness experiences are available in Naikoon Park and the park does attract these visitors. However, visitors who come to the Charlottes seeking these experiences are also offered South Moresby or the large fishing lodges on Graham Island and may not visit Naikoon Park. Some of wilderness tour operators encourage their guests to include Naikoon in their travel itineraries.

The majority of off-island visitors to Naikoon Park are part of the touring market segment. The touring visitor is typically interested in scenic features, natural history and Haida culture. Camping is a preferred and major part of the visitor experience and many touring visitors participate in wilderness adventure or outdoor trips. For most visitors in the touring segment, the Islands and Naikoon Park are not a destination, but rather part of a larger circuit, eg. West Coast, Northern B.C. and/or Alaska. Most Americans are enroute to Alaska.

MODES OF TRAVEL

Most tourists to the Queen Charlotte Islands arrive by air at Sandspit or by ferry at Skidegate Landing. Consequently most off-island visitors to Naikoon Park enter the park from the south and travel to the north to North Beach, the park's most popular destination. This route takes visitors through Masset where a local airport, and a marine harbour provide an additional entry point for off-island visitors.

The majority of touring visitors arrive by ferry with their own or a rented vehicle. For the main visitor season from May to October, passenger and vehicle volumes on the Prince Rupert to Skidegate route increased at the following rates:

Vehicles

1987 - 10% increase1988 - 4.5% increase1989 - 4.5% increase1990 - 3% increase

Passengers

1987 - 13% increase
1988 - 9.5% increase
1989 - 4.5% increase
1990 - 2% increase

Statistics on resident travellers are not kept separately from visitor numbers. The DPA Group estimated that 8,990 touring visitors arrived by ferry between May and October in 1989. Most had their own vehicles; fewer than 900 were walk-ons.

In 1989, an estimated 1,000 touring visitors arrived by air.

Very few bus tours come to the Charlottes but those that do usually visit Naikoon Park. Bus traffic on the Prince Rupert to Skidegate ferry route increased from 6 buses in 1988 to 10 in 1991 (to end of July). These bus figures also include wilderness

travel groups embarking on kayak trips to South Moresby. Several motorcoach tour groups arrive by air or as walk-ons on the ferry and are met with locally organized transportation by a ground operator. This would account for only 6 to 8 groups per year. Helicopter tours and fixed wing flights of the park are available, but are expensive and infrequently used.

CAMPGROUND USER PROFILE

Information does not exist to provide accurate profiles of the visitors to Naikoon Park, particularly local visitors. However, campground surveys conducted in 1988 did provide an overall picture of the touring market segment. These surveys indicate that two-thirds of the campground users are from British Columbia and about one-quarter are from the North Coast of B.C. About 16 percent are from Alberta, mainly Calgary and Edmonton.

Visitors from Washington, Oregon and California comprise about 6 percent of the total and 4.5 percent are from overseas, mostly young German or Swiss backpackers. Two percent of the campground users during the summer season are local residents. About 20 percent of the park's seasonal campground users are repeat users. Among this group are visitors from the North Coast who return to dig for clams, crab, fish or hunt. There are no statistics on the percentage of local day users.

Family groups make up about 39 percent of the party types and seniors comprise only 6 percent. The majority of visitors are adult groups. The average party size is 3.0, however 45 percent of those surveyed travel in groups of two. The most frequent mode of travel is truck camper (30.5 percent). Of the nearly 30 percent who tent camp only, transportation is by car, truck, bicycle or hitchhiking.

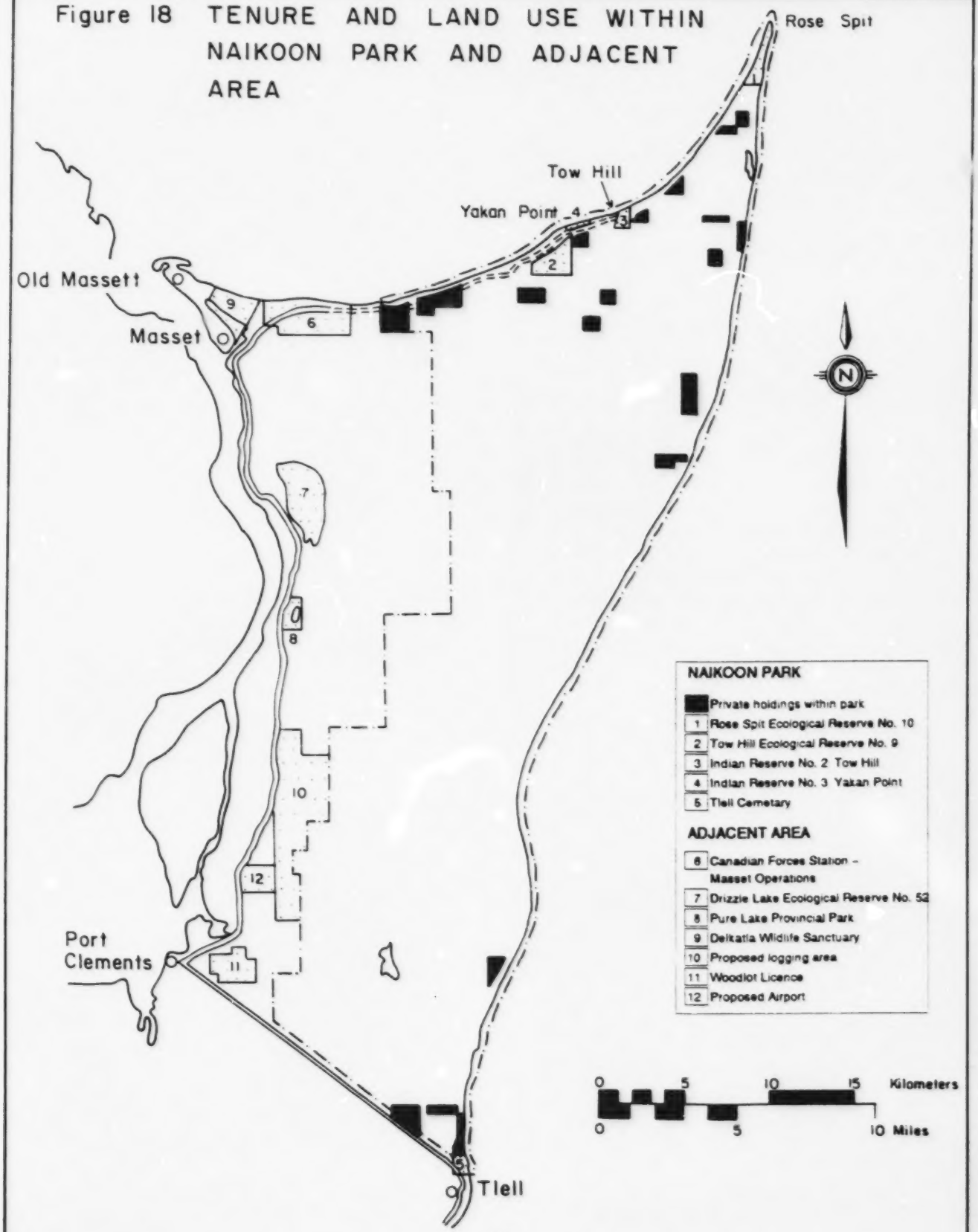
THE FUTURE

Market studies indicate that travellers have a strong desire to learn about their destination. More intensive interpretation of the natural resources is an important factor in visitor satisfaction as well as an important resource management approach. The Islands receive significant national and international media coverage of the Haida history and culture and the opportunities for wilderness adventure. As a result, the role of the Islands as a visitor destination will probably increase among the touring segment. For example, a recent survey of out-of-province visitors to B.C. indicated that the activity they would most like to participate in on a return trip to B.C. was a visit to the Queen Charlotte Islands.

There have been significant increases in both day use and campground use in Naikoon Park since 1985. Increases of 49 percent in day use and 24 percent in camping which occurred in 1987 probably reflect the impact of the media coverage received by South Moresby (see Figures 3 and 4). It is expected that visitor use of Naikoon Park will continue to be affected by the publicity generated by the South Moresby/Gwaii Haanas National Park Reserve.

A tourism plan is being developed for the Queen Charlotte Islands as part of the Federal-Provincial Regional Economic Development Initiative. Each of the Islands' communities and the Haida people are developing tourism strategies. Naikoon Park will play an important role in the overall tourism strategy for the Queen Charlotte Islands as a touring destination.

Figure 18 TENURE AND LAND USE WITHIN NAIKOON PARK AND ADJACENT AREA



5. LAND TENURES, OCCUPANCY RIGHTS AND RESOURCE USES IN AND ADJACENT TO NAIKOON PARK

A number of land tenures and resource users in and adjacent to Naikoon Park may have bearing on park management activities or visitor use. These are shown in Figure 18.

TENURES IN NAIKOON PARK

PRIVATE LAND

There are 22 parcels (35 lots) of private property widely distributed within Naikoon Park. These parcels total approximately 1500 ha. Six of these parcels are along the Tow Hill Road and some are subdivided into smaller lots on which homes have been built. BC Parks has developed a list of the private properties within the park priorized for acquisition and is pursuing the purchase of lots as they become available and if funds are available, according to the priorized list.

In the interim, BC Parks has no means of controlling or limiting development on any private land but does maintain a policy of denying road development on rights-of-way across park land to private land.

ECOLOGICAL RESERVES

There are two Ecological Reserves within the park boundaries. Both were established in 1971.

Ecological Reserve #9, known as the Tow Hill Ecological Reserve, is situated to the west of
Yakan Point. This 514 ha Reserve protects a broad expanse of hard sand beach and a wide foreshore and backshore of dunes and ancient beaches. The inland part of the Reserve includes low-lying bogs, old-growth forest communities, several ponds and a portion of the meandering Kliki Damen River. The Tow Hill Road crosses the Reserve.

Several unique plant communities associated with dunes, coniferous forest and bogs are protected in the Reserve. These include some sand-binding grasses and herbs that are rare in the province. Sea mertensia (Mertensia maritima), a plant whose B.C. range is restricted to the Queen Charlottes, is found in the Reserve. There are at least ten species of peat moss and 12 species of reindeer moss in the bogs of the Reserve.

Ecological Reserve #10 at Rose Spit protects the largest spit of its kind in British Columbia and a diversity of plant communities on the dunes, driftwood piles and meadows created by the action of waves, wind and sand. This 170 ha reserve provides habitat for diverse birdlife, including species such as Snow Buntings not frequently seen anywhere else on the Queen Charlotte Islands. Marine mammals including whales, seals and sealions are frequent visitors in the nearshore and offshore waters.

INDIAN RESERVES

There are two Indian Reserves within the perimeter of Naikoon Park. Both were established in 1911 in recognition of Haida use of the sites particularly for the gathering of clams. They are the only two Reserves that are accessible by road from the village of Old Massett.

The Hiellen Reserve (I.R. 2) is situated at the end of the Tow Hill Road on the east side of the Hiellen River and includes 28.5 ha. It is crossed by many park visitors as they access the North Beach. The Old Massett Village Council permits parking on the Reserve and allows camping if permission is sought from the council.

In 1966, a section of the road to North Beach that cuts across the reserve was taken over by the provincial government by an Order-In-Council. The Ministry of Highways plans to maintain this section of road to provide access across the Reserve to the beach. However, the Village Council considers that the road is still attached to the Reserve and has closed the road to public use on occasion.

The Yakan Point Reserve (I.R.3) is 34.8 ha and includes 1.25 km of beachfront to the east of Yakan Point. It is adjacent to Ecological Reserve #9. It extends south of the Tow Hill Road which crosses the Reserve.

Several homes have been built on the Reserve and further residential development is likely in the future.

TLELL CEMETERY

The Tlell Cemetery is located on privately owned Lot 1354 within the park at Tlell. It is owned by the Archdioces of New Caledonis, and has been in existence since 1942. Some of the early settlers of Tlell and the East Coast are buried there, and there are approximately forty potential burial sites remaining.

COMMERCIAL ESTABLISHMENTS

Two small lodge guesthouses operate on private land within the park boundaries. The Tlell River House on Beitush Road at Tlell and the Alaska View Lodge Bed and Breakfast on Tow Hill Road on North Beach are both relatively new establishments.

There are two small businesses also under construction along the Tow Hill Road. These include Paul Bower's Whale and

Rock Museum, and Schultz and Smith's Bed and Breakfast.

ROAD RIGHTS-OF-WAY

There are two roads and rights-of-way within the park that are maintained by the Ministry of Highways.

Tow Hill Road (District Road 51) passes through the northern portion of the park for 15.5 km and provides access to Agate Beach campground, Tow Hill and North Beach. This gravel road has a 20 m wide right-of-way for most of its length. Parts of the right-of-way are gazetted, while other portions are maintained under Park Use Permits.

Beitush Road is a narrow gravel road which follows the south bank of the Tlell River. It provides access to private land and businesses within the park along the Tlell. It is used by many residents and visitors who fish and walk on the Tlell River banks. Beitush Road has a 20 m wide right-of-way.

MINERAL CLAIMS AND PLACER LEASES

No mineral claims or placer leases exist within the park and there are no known mineral occurrences or indications of significant mineral potential in the upland portions of the park. Section 9 of the Park Act prohibits any mineral staking, exploration or development.

In 1991, there was interest in staking the beach area in the vicinity of Fife Point for placer mining to recover gold from the black sands. The Park Act prohibits this activity.

PETROLEUM LEASES AND OIL EXPLORATION PERMITS

Prior to the establishment of Naikoon Park, three Petroleum and Natural Gas Titles were held from 1957 to 1965 on the land now within the park. Richfield Oil Corporation drilled exploratory wells and conducted seismic surveys between 1958 and 1961 at Tow Hill and Cape Ball. A network of mining roads and seismic lines crisscrossed the bogs but as there were no indication of hydrocarbons the leases were allowed to lapse.

There has been no further interest since the creation of the park and the Parks Act prohibits any exploration activity.

Chevron Canada Resources Ltd. and Petro-Canada Resources Ltd. hold oil exploration licences which include all the marine waters along the entire shoreline of Naikoon Park. The moratorium on offshore oil exploration was lifted in 1988 but exploration guidelines require that no exploratory drilling be conducted within 20 km of land.

BIG GAME AND FISHING GUIDING LICENCES

There are no current Park Use Permits for big game or angling guiding in the park and there is no legal guiding within the park

boundaries. A Park Use Permit which previously authorized big game guiding was cancelled in 1987 and the area of Naikoon Park is now excluded from the Licenced Guide Outfitter's territory.

Angling guide licences are issued annually by the BC Ministry of Environment and have included the Tlell, Hiellen, Sangan and other rivers, and Mayer Lake in the past. However, Park Use Permits are also required in order to guide legally within the park. No Park Use Permits for angling guiding have been issued to date.

REGISTERED TRAPLINES

Historically, trapping provided a small income for many of the settlers within the park. When Naikoon Park was created in 1973, there were 7 Registered Traplines entirely or partially within the park boundaries, six of which were registered to individuals. Over time, trapping rights within the park are being cancelled and the portions of five of those traplines within the park have been cancelled, relinquished or transferred to the Crown.

Presently there is only a part of one Registered Trapline within the park boundaries under a Park Use Permit This line is in the northwest corner of the park and is actively trapped for beaver, raccoon, marten, muskrat, and otter by a resident non-native trapper.

As well, a trapline in the Tlell is registered, but has not been active in the last few years. It is not under a Park Use Permit.

PARK-USE PERMITS

There are 10 Park Use Permits currently issued within Naikoon Park. Only one is for commercial recreational guiding within the park. Two are for residential use on land leased from the Crown, one is for a trapline and two are for the park contractors who operate the campgrounds. The annual Tlell Fall Fair occurs on land in the park at the park headquarters under a Park Use Permit. Other permits include a highway right of way, a gravel pit, and a public telephone. A complete list of current Park Use Permits is included in Appendix 9.

Other Park Use Permits existed in Naikoon previously. These included at least two Permits for recreational tours and guiding, one for big game guiding and at least one for a trapline. All were either not renewed or were cancelled.

OTHER TENURES

Two other small reserves, both held by Department of Transport (Canada), exist within the park boundaries. Block A of District Lot 1016 at Rose Spit is reserved for an automatic weather station. District Lot 63 is reserved for a radio transponder site.

The moss-laden trees of Tow Hill Road

A typical example of one of Naikoon's exposed beaches

RESOURCE USES IN NAIKOON PARK

CLAM DIGGING

Commercial digging of razor clams has occurred on North Beach since at least the 1920's. In 1991, 28 licences for commercial razor clam digging were issued by the Department of Fisheries and Oceans (DFO). There are no restrictions on the number of people who dig clams under each licence and it is estimated that about 160 people, mostly residents of Old Massett, currently participate in this fishery. The Haida clamdiggers account for about 85 percent of the commercial clam harvest.

Clam digging occurs all year round but most of the digging activity is in the months of March to June when diggers are spaced every 100 metres from about 3 km west of Yakan Point to 6 km east of Tow Hill. The amount of clam digging depends on tides and the operating season of the cannery in Masset. The average annual harvest on North Beach over the last ten years has been 250,000 pounds with an average value of $125,000.

Commercial clam digging only occurs on beach areas which are below the three foot tide. Thus, DFO and BC Parks estimate that up to 80 percent of the clams are actually dug beyond the park boundary which extends 201 metres from the high water natural boundary. However, vehicles associated with the clam harvest cross the beach within the park to reach the digging areas outside the park.

In addition to the commercial harvest, digging razor clams is a significant recreational attraction for many visitors and local residents and is an activity that is featured in the park promotional material. For many local residents it is an important traditional food-gathering activity as well as recreation. This recreational harvest has been increasing in recent years and in 1991, DFO estimates that 10,000 pounds were taken in the recreational fishery. No licences or permits are required for recreational clamming.

DFO has projected that an annual harvest of at least 1,000,000 pounds could be sustained.

SCALLOP COLLECTING AND CRABBING

During the fierce winter storms in MacIntyre Bay and Dixon Entrance, free swimming weather vane scallops wash up on North Beach. These are collected for food by local residents. No licences are required but the salvaged scallops are not allowed to be sold. In an average year, 7,000 to 10,000 scallops wash up but in 1990-91, an exceptional year, it was estimated by DFO that 50,000 to 60,000 pieces washed up.

There is a recreational fishery for Dungeness crabs in the intertidal areas along North Beach in the park. Park visitors and residents use waders and dip nets or set traps to catch crabs. DFO has been monitoring the incidence of undersized crabs and over-limits being taken in this fishery. A major commercial crab fishery occurs in the waters of MacIntyre Bay.

HUNTING

Hunting is allowed within Naikoon Park but the hunting season is shorter than in adjacent areas. The park is closed to hunting and the discharge of firearms from April 1 to September 1. Some hunting, primarily by Queen Charlotte Island residents, occurs in other months, primarily for black-tailed deer. Hunting activity is concentrated along Highway 16, the east and north beaches and Mayer Lake. There is very little hunting for bear or other animals in the park although seasons do exist for them.

A small area in the vicinity of the park headquarters and Misty Meadows campground at Tlell and along the shore to the mouth of Tlell River is closed to all hunting. A 50 metre strip along the south east banks of the Tlell River is open only to shotguns and
shot to allow the hunting of ducks but little duck hunting occurs within the park.

SPORT FISHING

Sport fishing is allowed in the park and, other than restrictions on guiding, there are no special restrictions in place.

Fishing takes place year round from the banks of the Tlell River for coho, steelhead and resident and sea-run cutthroat and Dolly Varden. The peak activity is in September when large numbers of visitors and residents fish for coho.

Many residents feel that fish stocks, particularly cutthroat,
have been overfished.

There is also a very active fall sport fishery for coho in the Sangan and Hiellen Rivers and winter fishery for steelhead. The Mayer and Cape Ball Rivers are fished by some anglers but most of the salmon fishing near these streams occurs from small boats along the shoreline.

A limited amount of fishing for cutthroat trout takes place in Mayer Lake.

BEACHCOMBING AND SALVAGE

Naikoon is well known as an accessible place for beachcombing. There is a variety of material collected by both locals and visitors. Island residents have a long tradition of gathering wood products, seafood and marine life and a variety of heavy articles from the beaches.
Periodically capsized boats come ashore and are salvaged. Crab traps frequently wash ashore. However, they are owned and usually recovered by local crab fisherman.

Visitors take delight in the glass bottles, floats and assorted other junk that floats up on the beaches from afar. As well there are many tons of garbage, fish net, plastic, and fuel drums that wash up every year.

OTHER

A variety of unusual resources are harvested commercially and recreationally within Naikoon Park. These include significant and increasing commercial harvests of edible mushrooms and cones for the production of tree seedlings which occur on a regular basis.
No trees are cut commercially within the park boundaries, but a considerable amount of driftwood is removed for sale as firewood and for personal use.

TENURES ADJACENT TO NAIKOON PARK

PRIVATE LAND

There is a considerable amount of private land adjacent to, or near, the park boundaries in Tlell and along the Tow Hill Road. Many of these lots are occupied by permanent and summer residences, small businesses and a ranch and are part of long established communities.

PURE LAKE PROVINCIAL PARK

Pure Lake was established in 1981 as a 130 ha Class A Provincial park. It is adjacent to Highway 16, 25 km from Port Clements and 17 km south of Masset. The park includes a lake and sandy beach accessed by a short trail and a variety of bog, open pine forest and closed cedar pine hemlock forest.

The sandy beach is used by Masset residents in the summer months for swimming and sunbathing. The open pine forest along the trail, and the forest along the lake shore, provide opportunities for observing forest birds.

DRIZZLE LAKE ECOLOGICAL RESERVE

This 837 ha reserve was established in 1973 to preserve an undisturbed lake bog ecosystem for research on unique threespine stickleback populations and their predators. The Reserve includes all the upstream tributary waters of Drizzle Lake and a variety of closed forest, open forest and bog habitats.

The 114 ha lake supports populations of stickleback found only in the Queen Charlotte Islands, as well as Dolly Varden, cutthroat and coho. These fish are preyed upon by at least 18 species of birds, mammals and insects. The interactions between these predators and the fish populations, and the morphological adaptations to predation by the stickleback, have been the subject of twenty years of continuous research by Dr. Tom Reimchen. Dr. Reimchen and Sheila Douglas have also studied nesting Red-throated Loons and other aquatic birds on the lake and have recorded 75 species of plants, 37 mosses, six liverworts and 24 mushrooms in the Reserve. More scientific research has been conducted on this reserve than any other Ecological Reserve in BC.

DELKATLA WILDLIFE SANCTUARY

The Delkatla Wildlife Sanctuary is a 287 ha area of coastal wetland with open marsh and meadow bordered by spruce forest within the Village of Masset boundaries. It is an important link in a chain of coastal wetlands and an important landfall for birds during spring and fall migrations. It attracts a variety of waterfowl, shorebirds, raptors and other migratory species.

At least 132 species have been reported from the Sanctuary and 33 species are confirmed as nesting.

The Sanctuary has interpretative signs, two viewing towers and trails and is easily accessible from Highway 16 on the way from Masset to Naikoon Park.

OFFSHORE OIL EXPLORATION LICENCES

As described earlier, Chevron and Petro-Canada hold oil exploration licences for all the waters adjacent to the shoreline of Naikoon Park.

DESIGNATED PLACER AREAS

The only designated placer areas on Graham Island are along Masset Sound between Pure Lake and Masset. They are well removed from Naikoon Park.

COMMERCIAL AND RECREATIONAL FACILITIES FOR VISITORS

Two lodge guesthouses operate on the perimeter of the park supplementing the accommodation provided within the park. These are the Bellis Lodge and Hostel, adjacent to the Tlell River Picnic Ground and the Naikoon Park Motel near the park boundary along Tow Hill Road.

A variety of other accommodation, services and recreational opportunities for visitors are provided in Tlell to the south of the park; in Port Clements, six km from the park boundary; and in Masset, nine km from the park boundary. These are briefly described in Appendix 10.

OTHER

There are a variety of other tenures close to the park boundaries. The Canadian Forces Masset Operations Site, a large circular antenna locally known as "the Elephant Cage", is 3 1/2 km from the park boundary on Tow Hill Road and is surrounded by a large restricted access area.

A Woodlot Licence, near Port Clements, extends to within a kilometre of the park boundary and may eventually bring logging roads close to the park boundary near Mayer Lake.

RESOURCE USES ADJACENT TO NAIKOON PARK

LOGGING

One cut block has recently been logged close to and along the park boundary and several more cutblocks are proposed to be logged within the next five years. None of these proposed blocks have final approval for cutting but are shown on current Five Year Logging Plans. A brief description of these blocks is included in Appendix 11.

This logging is proposed on two Timber Sale Licences - T.S.L. A-16879 and A-16880 - held by QCI Sawmills and Abfam Enterprises.

It will occur along the park boundary to the west and north of Mayer Lake. Extensive logging is proposed along Copp Creek, a tributary of Mayer Lake, and around Watt Lake.

The Ministry of Forests has no plans for any logging on Crown Land in the vicinity of the park. They are unaware of any plans for logging on private land near the park.

6. PLANNING AND MANAGEMENT ISSUES IN NAIKOON PARK

The planning and management issues in Naikoon Park will be addressed in the Master Plan. Resolution of these issues will ensure that the dual conservation and recreation objectives for park management are met.

The following planning and management issues were identified by BC Parks staff and the consultant during the preparation of the Background Document. It is anticipated that the public and the Study Team may identify additional issues, and suggest ways to deal with them, during the consultation and review process while the Master Plan is being prepared.

These issues are presented here to provide preliminary information to interested people, so that they will be better prepared to participate in the public forum of this master planning process. All of the issues will be discussed openly with the public, and the local Study Team before a draft master plan is prepared.

VEHICLE USE ON BEACHES

The use of vehicles on the beaches of the east coast and north coast of Naikoon Park is a popular activity. The 1983 Master Plan imposed some restrictions on vehicle beach access, but these met with strong opposition by island residents. As a result, the restrictions have not been enforced, and people have continued the activity.

Vehicles have provided access to the few private holdings in the park and to the razor clam digging areas adjacent to the park for many years. During the cooler and wetter months, vehicles are relied on by some island residents who travel the beaches in the park.

Most vehicles travel along designated routes or below the driftwood line, and in these areas there is no evidence that this use is damaging the beach ecosystem. However, a small percentage of vehicles are driven into sensitive areas such as fragile sand dune and shoreline vegetation zones, and bird nesting sites.

Naikoon Park attracts some hikers to its beaches, particularly East Beach, that are looking for a wilderness experience. Some hikers looking for this experience may see the occasional vehicle on the beach, and may lessen the wilderness atmosphere for them. Some hikers are rescued by people in vehicles, when they have become fatigued or during stormy weather.

The management of off-road vehicle use will be an issue considered in the Master Plan.

PARK BOUNDARIES

At least four sections of the park boundaries will be reviewed in the Master Plan. These include:

(i) the northwest corner, where a number of private residences occur on private land within the park.

(ii) the western boundary, where logging is planned adjacent to the park boundary near Mayer Lake. Consideration will also be given to including the Pure Lake, Drizzle Lake and Skonun Lake areas in the park.

(iii) the shoreline boundaries, which could be extended to include the entire intertidal and some subtidal area.

(iv) the boundaries of the Ecological Reserves, where some activities not compatible with the protection of the ecological values presently occur.

PRIVATE INHOLDINGS IN THE PARK

Private inholdings within the park create a number of management issues which will be reviewed in the Master Plan. These include:

(i) Development along the Tow Hill Road. Expansion of permanent residences and summer homes within the park along Tow Hill Road will create demands for improved roads and power lines. Both of these require a wider right of way than currently exists and will lead to further residential traffic within the park.

The Tow Hill Road provides public access to private property, 2 Indian Reserves, and a commercial fishery. Of the portion that passes through the park, approximately 5 kilometres of road are maintained under a Park Use Permit. There is some demand from local residents to have the roadway widened and upgraded.

(ii) Road widening of Beitush Road. Because of increased traffic and concerns for road safety, the Ministry of Highways plans to straighten and widen this road in the near future.

(iii) Access to private inholdings: BC Parks has denied access across park land to the private properties in the park. However, BC Parks continues to be approached with requests for access.

(iv) Accretion: Under the Accreted Land Act, private land owners can have their lot boundaries extended to include land accreted by the deposition of beach sediments. This affects how much of the beach and sand dunes in these areas are within the park.

BC Parks policy is to purchase private lots within the park, according to a priorized list, as acquisition funds become available and when owners are willing to sell. The Master Plan will review this priority list.

ROADS TO THE EAST BEACH

There have been requests from some local residents to provide public road access for vehicles to the East Beach in the vicinity of Cape Fife at the north end of the park and near Tlell at the south end. A road down the full length of the East Beach has also been proposed by local residents. By providing access for some visitors, roads will reduce the wilderness beach experience for others and could increase vehicle traffic in the dunes and on the East Beach.

Road development is an issue that will need attention in the Master Plan.

TLELL RIVER CROSSING

The vehicle crossing of the Tlell River at the end of Beitush Road is an issue that is closely associated with vehicle use on the beaches. A Department of Fisheries and Oceans sign at the end of Beitush Road prohibits any vehicle crossing the Tlell River from March 1 to October 15. This is in order to protect fish habitat but is difficult to enforce. Since crossing the Tlell is a part of any vehicle use on the East Beach, regulations for crossing the Tlell will be reviewed as part of the overall assessment of vehicle use on the East Beach in the Master Plan.

COMMERCIAL RAZOR CLAM DIGGING

Commercial razor clam digging within and adjacent to the Park is regulated by the Department of Fisheries and Oceans. Although most of the actual digging is outside the park, vehicles travel across North Beach within the park to reach clam digging areas. The management of this commercial operation and the associated vehicle traffic in the park will be considered in the Master Plan.

MANAGEMENT OF ECOLOGICAL RESERVES

The Rose Spit and Tow Hill Ecological Reserves require special management to protect the ecological values for which they were established. The management of non-conforming uses in these Reserves will be examined in the Master Plan.

LOCAL USE

Some Queen Charlotte Island residents have been affected by the establishment of the park because some long-standing activities have been controlled or managed to protect park features and resources. Park planning and management will be sensitive to local interest groups and long-time local uses. These will be considered in the Master Plan.

VISITOR ISSUES

Naikoon Park and the Queen Charlotte Islands have been promoted as tourist destinations. Visitor use of the park has grown steadily since its establishment in 1973. BC Parks will assess the needs of park visitors with regard to the interpretation of the provincially significant physical, biological and cultural features of the Park. The Master Plan will look at what level of development is appropriate for the park.

PROMOTION OF NAIKOON PARK

The manner in which Naikoon Park is promoted to the local and travelling public will be considered in the Master Plan.

CO-ORDINATION OF TOURISM PLANNING

With the vast amount of promotion and publicity about the Queen Charlotte Islands

in recent years, tourism is increasing. Several tourism development initiatives are underway including the construction of Visitor Reception Centres in Queen Charlotte City and Sandspit.

The Master Plan will integrate the planning for Naikoon Park with the planning for the South Moresby/Gwaii Haanas National Park Reserve and the larger tourism development initiatives in the Queen Charlottes as a whole.

ACCOMMODATION OF VISITORS

At present, the demand for overnight camping facilities in the park sometimes exceeds the capacity of the developed camping areas. The number of visitors requiring camping facilities is expected to increase in future. The Master Plan will consider various options for meeting the demand for visitor accommodation.

INFORMATION

There is little reliable statistical information on visitor use of the back country areas. This includes the amount of hiking and vehicle use on the east and north beaches. There is inadequate information on a number of other visitor uses and no separation between local and touring visitor use.

As well, detailed information on park resources is lacking. There is little information on the forest ecosystems and the wildlife resources in the park.

The information necessary to facilitate park planning and management will be examined and priorized in the Master Plan.

SAFETY ON EAST BEACH HIKE

The 90 km beach hike from Tlell around Rose Spit to Tow Hill is a remote, challenging hike with river crossings and very limited facilities. Even in summer, violent storms and inclement weather will occur and some hikers are unprepared for the elements. The Master Plan will review the needs of hikers on the East Beach.

INTRODUCED SPECIES

Introduced animals in the park including beaver, raccoon and squirrels have affected the native species that have evolved in the isolated environments of the Queen Charlotte Islands and caused dramatic changes to the environment. New species continue to be introduced. Sheep and pheasants have been introduced recently and there is concern for the introduction of non-native fish, aquatic plants, and feral cats and dogs.

The Master Plan will consider the management and prevention of introduced species.

HUNTING

Hunting is legal in Naikoon Park. The Master Plan will examine if changes to hunting regulations are desired to improve wildlife management or visitor safety.

ANGLING GUIDING

At present, no Park Use Permits have been issued to angling guides for any of the rivers within the park. The Master Plan will consider what interest there is for this commercial activity and review the status of fish stocks within the park.

COLLECTION

Although the Park Act prohibits collection, a variety of items including spruce and pine cones, edible mushrooms, large fungi from the trunks of trees, beach agates and firewood are collected for commercial use and by recreationists in Naikoon. The Master Plan will consider these uses.

HORSES AND MOUNTAIN BIKES

The Park Act prohibits the use of horses and bicycles off designated roads in Naikoon Park. However, they are presently allowed on beaches below the driftwood line in the same way that motor vehicles are allowed.

The increasing use of horses and bikes on the beaches and trails within the park will be addressed in the Master Plan.

POWERBOATS

Powerboats are used for sport fishing and recreation on Mayer Lake and on the Tlell River. The Master Plan will consider the use of powerboats.

FLOTSAM AND JETSAM

Because of the exposed nature of the park beaches, many large and small items wash up. These range from dead whales and capsized fishing boats to quantities of lumber and fishing gear, glass balls, fuel barrels and a vast array of garbage. They provide a variety of problems, hazards and salvage opportunities and there is presently no management policy regarding these issues. The Master Plan will examine these issues.

OIL SPILLS

With the considerable amount of vessel traffic in the waters of Hecate Strait adjacent to the beaches of Naikoon Park, there is a possibility of an oil spill. In concert with other government agencies, the Master Plan will consider the options for oil spill contingency planning for the park.

GRAZING

Domestic livestock and feral cattle have continued to graze freely in portions of the park for many years. This activity may be contributed, along with other introduced animals to altering the natural dune and estuary plant ecology. Grazing use is relatively low at present but the issue of grazing will be considered in the Master Plan.

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Appendix 1 Intertidal Marine Life in Naikoon Park (compiled by students of Lester B. Pearson College of the Pacific, June, 1991 at Tow Hill and Agate Beach)

Species		Habitat	Abund
Whitecap limpet	Acmaea mitra	P	M 3
Hydroids	Aglaophenia spp?	P	M-L 3
Giant green anemone	Anthopleura xanthogrammica	P	M-L 3
Aggregate anemone	Anthropleura elegantissima	P/R	M-L 2
Sea lemon	Archidoris montereyensis	R	L 4
Acorn barnacle	Balanus glandula	R	H-M 1
Thatched barnacle	Balanus cariosus	R	M-L 1
Coralline algae	Corallina spp?	P	M-L 1
Broadbased seasquirt	Cnemidocarpa finmarkiensis	P	L 4
Finger limpet	Collisella digitalis	P/R	H-L 1
Ribbon worm	Emplectonema gracile	P	L 2
Northwest ugly clam	Entodesma saxicola	R	L 4
Feartherduster tapeworm	Eudistylia vancouveri	P/R	L 1
Purple encrusting sponge	Haliclona permollis	P	L 3
Sea sac	Halosaccion glandiforme	R	L 3
Kelp bug	Idotea wosnesenskii	Γ	M 4
Black leather chiton	Katherina tunicata	P	M 3
" " "	" "	R	L 1
Broad six-rayed seastar	Leptasterias hexactis	P	M-L 3
" " "	" "	R	L 3
Encrusting pink algae	Lithothamnium spp	P	M 2
" " "	" "	R	L 1
Periwinkle	Littorina sitkana	R	M-L 2
Mossy chiton	Mopalia muscosa	P	L 3
California mussel	Mytilus californianus	R	L 3
Bay mussel	Mytilus edulis	P	H-L 1
" "	" "	R	M-L 1
Plate limpet	Notoacmea scutum	P	H-L 2
" "	" "	R	M-L 2
Speckled limpet	Notoacmea persona?	P/R	M-L 3
Tidepool sculpin	Oligocottus maculosus	P	H-L 3
Hairy hermit crab	Pagurus hirsutiusculus	P	M-L 3
Black encrusting algae	Petrocelis spp?	R	M 3
Surfgrass	Phyllospadix scouleri	P	M 3
"	" "	R	L 3
Goose barnacle	Pollicipes polymerus	R	L 3
Wrinkled seasquirt	Pyura haustor	P	L 3

Appendix 1 (cont.)

Species		Habitat		Abund
Painted tealia	Tealia crassicornis	P/R	M-L	3
Ribbed whelk	Thais emarginata	P/R	M-L	1
Wrinkled whelk	Thais lamellosa	P/R	M-L	3
Lined chiton	Tonicella lineata	P	M	2

Habitat

R rock surfaces
P tide pools

H higher tidal range
M mid tidal range
L lower tidal range

Abundance

1 very common
2 common
3 occasional
4 rare

Appendix 2 Vegetation Communities in Naikoon Park (from Cannings, 1975)

Maritime communities

- Continuous sand beaches
- Rock or cliff communities
- Salt marshes

Swamp communities

- Wet swamps
- Dry swamps

Mire community

Raised bog community

Bog forest community

Coastal sand dune forest community

Closed forest community

Appendix 3 Breeding Birds in Naikoon Park.

Species	Association/status	Location
Common Loon	Breeds, resident	Bog lakes, interior
Red-throated Loon	Breeds, resident	Bog lakes, interior
Canada Goose	Breeds, resident	Muskeg, interior
Green-winged Teal	Breeds, seasonal	Estuary
Mallard	Breeds, resident	Wetland
Northern Pintail	Breeds, seasonal	Unknown
Common Merganser	Breeds, resident	River banks
Bald Eagle	Breeds, feeding	Forest edge, beach
Red-tailed Hawk	Breeds, feeding, resident	Forest, dunes
Blue Grouse	Breeds, resident	Forest, interior
Sandhill Crane	Breeds, seasonal	Muskeg, interior
Semipalmated Plover	Breeds, seasonal	High beach, driftwood
Killdeer	Breeds, resident	High beach, driftwood
Black oystercatcher	Breeds, resident	Rocks, high beach
Least sandpiper	Breeds, seasonal	Dunes, beach
Marbled murrelet	Breeds, threatened may be resident	Forest, interior
Saw-whet owl	Breeds, QCI sub species, resident	Forest
Rufous Hummingbird	Breeds, seasonal	Forest, pine muskeg
Belted Kingfisher	Breeds, resident	River bank, forest
Red-breasted sapsucker	Breeds, resident	Forest
Hairy Woodpecker	Breeds, QCI sub-species, resident	Forest
Northern Flicker	Breeds, resident	Forest
Western Flycatcher	Breeds, seasonal	Forest
Tree Swallow	Breeds, seasonal	Forest
Barn Swallow	Breeds, seasonal	Unknown
Steller's Jay	Breeds, resident QCI subspecies	Forest
Northwestern Crow	Breeds, resident	Forest, beach
Common Raven	Breeds, resident	Forest, beach
Chestnut-backed chickadee	Breeds, resident	Forest

Red-breasted nuthatch	Breeds, resident	Forest
Brown Creeper	Breeds, resident	Forest
Winter wren	Breeds, resident, dark form	Forest
American Dipper	Breeds, resident	Rivers
Golden-crowned kinglet	Breeds, resident	Forest
Swainson's thrush	Breeds, seasonal	Forest
Hermit thrush	Breeds, seasonal	Forest
American Robin	Breeds, seasonal	Forest, beach
Varied thrush	Breeds, resident	Forest
Orange-crowned warbler	Breeds, seasonal	Open pine muskeg
Townsend's warbler	Breeds, poss. QCI subspecies, seasonal	Forest
Fox Sparrow	Breeds, resident dark form	Forest
Song sparrow driftwood	Breeds, resident dark form	Grassy dunes,
Lincoln's sparrow	Breeds, seasonal	Grassy dunes
Dark-eyed junco	Breeds, resident	Forest edge
Pine siskin	Breeds, resident	Forest
Pine grosbeak	Breeds, resident, QCI sub species	Forest

Appendix 4 Freshwater Fish Species in Naikoon Park

Pink salmon	Oncorhynchus gorbuscha
Coho salmon	Oncorhynchus kisutch
Chum salmon	Oncorhynchus keta
Rainbow (Steelhead) trout	Oncorhynchus mykiss
Cutthroat trout	Oncorhynchus clarki
Dolly Varden char	Salvelinus malma
Prickly sculpin	Cottus asper
Coastrange sculpin	Cottus aleuticus
Threespine stickleback	Gasterosteus aculeatus
Western brook lamprey	Lampetra richardsoni
Pacific lamprey	Entosphenus tridentatus

Appendix 5 **Native Land Mammals in Naikoon Park** (adapted from Cowan, 1989 and Cannings, 1975)

River otter	Lutra canadensis periclyzomae
Ermine	Mustela erminea haidarum
Pine marten	Martes americana nesophila
Black bear	Ursus americanus carlottae
Dusky shrew	Sorex monticolus elassodon
Deer mouse	Peromyscus maniculatus keeni
Bats	
California myotis	Myotis californicus caurinus
Keen's myotis	Myotis keenii keenii
Little brown bat	Myotis lucifugus alascensis
Silver-haired bat	Lasionycteris noctivagans

Appendix 6 List of Marine Mammals Near Naikoon Park

Species	Location
Grey Whale	Offshore, nearshore
Humpback Whale	Offshore, nearshore
Killer whale	Offshore
Minke whale	Offshore
Sei whale	Offshore
Fin whale	Offshore
Blue whale	Offshore
Sperm whale	Offshore
Dall porpoise	Offshore
Pacific harbour dolphin	Offshore
Pacific white-sided dolphin	Offshore
Stellar Sea Lion	Offshore, sand spits
Hair seals	Offshore, nearshore, sand spits
Northern fur seals	Offshore
Sea Otter	Offshore

Appendix 7 List of Introduced Land Mammals and Amphibians in Naikoon Park
(adapted from Cowan, 1989 and Foster, 1989)

Sitka black-tailed deer	Odocoileus hemionus sitkensis
Raccoon	Procyon lotor vancouverensis
American beaver	Castor canadensis leucodontus
Muskrat	Ondatra zibethica osoyoosensis
European roof rat	Rattus rattus rattus Rattus rattus alexandrinus
Norway rat	Rattus norvegicus
Red squirrel	Tamiasciurus hudsonicus lanuginosus
Cattle	
Cat	
Dog	
Rabbit	
Pacific tree frog	Hyla regilla

Appendix 8 Historic Trails and Sites

The Haidas had a number of trails used to travel between the east coast and Masset Inlet. One trail went from the Cape Ball area to the mouth of the Yakoun River. The settlers also constructed foottrails and wagon roads to connect their homesteads to the coast, especially in the area south of Tow Hill, Rose Spit and Mayer Lake. Not all the historic trails are wholly within Naikoon park. Only the 4 ** trails are still easily followed, all others are overgrown.

All these trails were in existence when Naikoon park was established. Some (**) are taped and easily followed. Others are difficult to find or follow and disappear in sections. Any hiker must be well-prepared in order to use any of these trails. The trail guide "Trails & Hikes" has printed and sold 4,000 copies.

1.** White Creek Trail: Originally was built as settlers' wagon road leading to several homesteads on Kliki Damen (White) Creek and on Harelda Lakes. Remnants of this trail can be found by experienced observers as there are old bridges, fences, drainage ditches to follow. Road turns at junction of old fences and leads to homestead ruins. Beyond this, trail is overgrown and difficult to find.

2.** Cape Fife-Mica Lake Trail: Trail begins at Hiellen bridge, was built in 1912 as a wagon road to homesteads at Mica and Kumara Lakes and the east coast. There are remnants of corduroy road, drainage ditches and old homestead. First part of trail has been re-routed by parks around Indian Reserve and footbridges across wet areas, is well-marked and maintained by parks.

3.** Four Corners/Swan Creek Trail: Another settlers' wagon road constructed during 1908-14 and follows the Hiellen River, crossing Swan Creek and proceeding on both sides south with old ditches and stretches of corduroy still visible. About 6 km. south the road turns an obvious 90 degrees East - and goes to the east beach on the Carr-Whittle wagon road, but is covered in windfall and extremely difficult now to follow. Also taped trail turns west, and goes to Jamott Lake. Trail is now littered with deadfalls and difficult but can reach lake and follow south shore line to old homestead with picket fences.

4. Spence Lake Trail: Once led off wagon road at Four Corners and led to one of the largest lakes in N.E. part of Graham Island where several settlers lived. Many of these pre-emptions advanced to Crown Grant status. Trail is overgrown, not used and almost impossible to find.

5. Carr Whittle Trail: This was once a wagon road built by Bill Carr and Ernest Whittle, residents of the Oeanda region. It led from the east beach north of the Blue Danube Swamp to Four Corners and was extensively used until the late 1930s, even driven by car. Used by hikers, although overgrown, and covered by windfall, and is difficult to follow.

6. Mayer Lake Shoreline Trail: Lake rimmed with cabins before World War I. Walk upstream (N) along shoreline only when water is low. Will see Baxter Pole Railway line remains.

7.** Mayer Lake Road: A 11 km. wagon road, leading from west shore of Mayer Lake to Kumdis Bay, built around 1910 by settlers. In 1920 the Baxter Pole railway road, intersected wagon road near Loon Lake and used to haul poles out of Mayer Lake region. The first telephone line to the east coast (1913) followed this road, spanned lake and continued overland to slightly south of Cape Ball. Road is badly overgrown, and rarely used. Road terminus is on private property.

8. Mexican Tom Trail: First blazed and used in 1904 by "Mexican Tom" Hodges to connect his ranch at Tlell River with Masset Inlet. In 1928, a plank road spanned the 12 miles following just south of the original trail, and was later gravelled in the late 1940's. This road was paved in 1967 and became part og Highway 16. On the north side of the paved road, the old trail and plank road is still visible in places, especially one bridge about 1 km. N.W. of Tlell River Bridge.

9. Beitush Road: Old wagon road on E. side Tlell River running north from Tlell River bridge which led to Bob Beitush farm. First bridge spanning Tlell River crossed river just north of mouth of Geikie Creek. A few of decayed bridge pilings remain. Beitush Road now gravel road maintained by Department of Highways.

Appendix 9 List of Current Park Use Permits (November, 1991)

Permit	Holder	Purpose
0825	Rodney W. Schatz	Trapping
1165	Kallahin Expeditions	Commercial tours
1195	Jim Fulton	Residence
1196	Ms T.A. Chatwin	Residence
1292	Ministry of Highways	Highway right-of-way
1305	Graham Island East Coast Farmers Institute	Annual Fall Fair
1632	Ministry of Transport and Communications	Gravel pit
1984	W. and K. Ronnenkamp	Operations permit
2116	E. & S. Enterprises	Operations permit
2290	BC Telephone Company	Public telephones

Appendix 10 Services and Facilities in Queen Charlotte Island Communities Near Naikoon Park.

The Village of Masset is the largest community on the Queen Charlotte Islands and is the closest community to North Beach and Tow Hill. Masset is located 9 kilometers west of the park boundary and calls itself the "Gateway to Naikoon Park". Masset provides a wide variety of services for visitors including hotel and bed and breakfast accommodations, an RV Park, sani dump, restaurants, grocery stores, gas stations, propane, car rentals, a laundromat, and other services. There is a Tourist Information Centre, an airport, small craft harbour, hospital and various government services. Recreational opportunities include boat rental, fishing and naturalist charters, a golf course and birdwatching in the Delkatla Wildlife Sanctuary.

Old Massett is a Haida community located 5 kilometers west of Masset. There is bed and breakfast accommodation, several craft stores, fishing charters and a museum.

The Village of Port Clements is located 6 kilometers from the park boundary and 22 kilometers from the park headquarters at Tlell. There is a motel, bed and breakfast accommodations, a lodge, gas station, grocery store, restaurants, a neighbourhood pub and other services. Recreational visitor attractions include a museum and fishing charter businesses.

Tlell is a rural community extending south of the park boundary for approximately 8 kilometers. It includes two establishments offering accommodation to visitors and several other small businesses.

Queen Charlotte City, Skidegate Landing and the Haida community of Skidegate are located about 40 kilometers south of the park headquarters at Tlell. These communities offer a variety of tourist services including hotel and bed and breakfast accommodations, restaurants, grocery stores, gas stations, propane, car rentals, craft and gift shops, a laundromat, tour businesses and other services. There is a hospital, small craft harbour and various government services. The BC Ferry from Prince Rupert docks here and the Queen Charlotte Museum is located at Skidegate. Recreational opportunities include boat rentals, fishing and naturalist charters.

Sandspit is the largest community on Moresby Island and site of the airport providing air service links to Vancouver. Sandspit has a hotel, several bed and breakfast establishments, car rentals, a gas station, grocery store and a variety of other services. Recreational opportunities include fishing and naturalist charters and a golf course.

Appendix 11 Proposed Logging Adjacent to or Near Naikoon Park (from Five Year Development Plans submitted to Ministry of Forests)

O.C.I. Sawmills, T.S.L. A-16879

Logging is approved in a narrow block on Lots 428, 429 and 434 east of Highway 16 and northwest of Mayer Lake.

Roads and cutblocks are projected, but not approved, on Lots 435, 435A and 436 in the vicinity of Copp Creek and Watt Lake. These blocks are approximately 1/2 km from the park boundary.

Abfam Enterprises, T.S.L. A-16880

Several cutblocks described below are in various stages of consideration and approval by the Ministry of Forests. With the exception of the one block that is logged, none have final approval for cutting.

C.P. 373 This block has been logged. It abuts the park boundary for a distance of approximately 150 m in Lot 396.

Watt 1This block is approved in principle by the Ministry of Forests. It abuts the park boundary in Lots 397 and 398.

Watt 2 This proposed block is approved in principle by the Ministry of Forests. It abuts the park boundary in Lot 398.

Watt 3 This large block is proposed but not yet approved by the Ministry of Forests. It abuts the park boundary in Lots 398A, 435A and 436A.

Loon 1 This block is approved on a Five Year Plan. It abuts the park boundary in Lot 390 and 393.

Loon 3 This block is proposed but not approved by the Ministry of Forests. It abuts the park boundary in Lot 390.

Appendix 12 List of Individuals Contacted

Ministry of Environment, Lands and Parks

Parks Division	Dan Adamson
Gerry Ferguson	Roberta Ffitch
Gordon MacDonald	Jim Hawes
Hugh Markides	Ken Zimmer
Dave Fauville	Gail Ross

Environment Division

Mark West	Rick Marshall
Tom Chamberlin	

Ministry of Energy, Mines and Petroleum Resources

Bryan Good	Colin Macgee
Vic Prado	

Ministry of Forests

Jim Guido	Bob Davie
Dan Hogan	

BC Ferries	Ministry of Transportation and Highways
Pam Ryan	Dave Byng

Canadian Wildlife Service
Gary Kaiser

Canadian Parks Service
Steve Suddes

Department of Fisheries and Oceans

Dennis Burnip	Gary Otto

Skeena-Queen Charlotte Regional District
Greg Fletcher

Old Massett Village Council
Michael Nicoll

The helpful assistance of the above in providing information for the Background Document is gratefully acknowledged.